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В малокарачкинском диалекте чувашского языка причастие прошедшего времени на *-пӘ* может оформлять относительные клаузы, сентенциальные актанты и стандарты сравнения, а также употребляться независимо. В статье для всех этих случаев предлагается единый синтаксический анализ, который предполагает, что суффикс *-пӘ* озвучивает вершину T[ense] (или иную подобную вершину, расположенную высоко в расширенной глагольной проекции). Возглавляемые причастиями группы в актантных и сравнительных клаузах могут рассматриваться как комплементы/определения при непроизносимых именных вершинах. Однако альтернативный анализ в терминах смешанных расширенных проекций также не может быть полностью отвергнут.

Ключевые слова: чувашский язык, сравнительные конструкции, сентенциальные актанты, параметрические имена, смешанные проекции, причастие, относительные клаузы.

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LOOKING FOR HIDDEN NOMINAL HEADS IN POSHKART CHUVASH COMPARATIVES (AND BEYOND)*

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In the Poshkart dialect of Chuvash, the past participle in *-nə* is used in relative clauses, sentential complements, phrasal standards of comparison, as well as independently. I argue that all these uses can be subsumed under a unified syntactic account that treats the suffix *-nə* as an exponent of T[ense] (or other similar head high in the extended verbal projection). Apparently nominalized participles in complement and comparative clauses can be analyzed as complements/modifiers to unpronounced nominal heads. However, an alternative analysis in terms of mixed extended projections can not be at present completely ruled out.

Keywords: Chuvash, comparative construction, degree nominals, mixed projection, nominalization, participle, relativization, sentential complementation.

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1. Introduction

As is typical for Turkic languages, Poshkart Chuvash[1] employs what Stassen [1985] calls a locational strategy for encoding comparison of inequality, with the gradable predicate optionally (but preferably) bearing the comparative suffix *-(dA)rAk* and the standard of comparison invariably marked with the ablative case:

(1) *xër atɕa arʑɨn atɕa-ran ɕyl̈e(-rek)*
girl child man child-ABL tall-CMPR
'The girl is taller than the boy.'

(2) *xër atɕa-ja arʑɨn atɕa-ran numaj(-rak) pədarkə par-za*
girl child-OBJ man child-ABL many-CMPR gift give-CV_SIM
'More presents were given to the girl than to the boy.'

This strategy is inherently phrasal[2]: the standard introduced by the ablative can only be a DP and when comparing to a standard referred to by a non-DP constituent, the latter must undergo nominalization in one way or another. In particular, any standard involving a VP or a larger projection has its main verb in the form of a past participle bearing a 3rd person possessive suffix to which the ablative marker is then attached:

(3) *jep kəmba tət-**n-ɨn-dʑen** polə lajk-rax təd-a-p*
I mushroom grab-PC_PST-P_3-ABL fish good-CMPR grab-NPST-1SG
'I am better at fishing than at gathering mushrooms.'

The same participial form (*-nə*) is one of the primary means of encoding relativization in Chuvash [Pavlov 1957: 221–223], cf. (4a–c) from [Logvinova 2019b]. It also appears in a wide range of complement clauses (5):

(4) a. *xoligan-zam arʑɨn atɕa-ja xën-etɕë*
hooligan-PL man child-OBJ beat-NPST.3PL
'The hooligans beat the boy.'

---

[1] The data for this study mostly comes from original fieldwork (2017–2021) in the village of Maloe Karachkino (Poshkart), Yadrinsky district, Chuvash Republic. All native speakers consulted display a mixture of dialectal and standard Chuvash features in varying proportions, which is reflected in the transcription used (cf. *-rak*~*-rax* for the comparative degree marker). To what extent the findings of the present study may be relevant for other varieties of Chuvash, remains an open question.

[2] Poshkart Chuvash also possesses a genuinely clausal strategy of comparison calqued from Russian, with a borrowed standard-introducing conjunction *tɕem* [Gerasimov 2020]. This is beyond the scope of the present paper.

b. [[*ëner* *arʑin* *atɕa-ja* *xëne-**në***] *xoligan-zam*] *tërme-re* *lar-atɕə*
yesterday man child-OBJ beat-PC_PST hooligan-PL prison-LOC sit-NPST.3PL
'The hooligans who beat the boy yesterday are in prison.'

c. [[*ëner* *xoligan-zam* *xëne-**në***] *arʑin* *atɕa*] *bolniʑ-ra* *vird-at*
yesterday hooligan-PL beat-PC_PST man child hospital-LOC lie-NPST[3SG]
'The boy whom the hooligans beat yesterday is in the hospital.'

(5) *vəl* *kaj-**n-i*** *man-a* *pəzʐrgan-dar-tɕ-ə*
s/he go-PC_PST-P_3 I.OBL-OBJ get.sad-CAUS-PST-3SG
'That s/he has left saddened me.'

Can different uses of the past participle in Poshkart Chuvash be given a uniform structural account? In the present paper, I will explore the possibility for such an analysis, drawing inspiration mainly from two sources: the parametric typology of participle-nominalizer polysemy proposed in [Dékány, Georgieva 2020, 2021] and the analysis of Japanese comparatives in terms of covert nominal heads argued for by [Sudo 2009, 2015]. The rest of the paper is structured as follows. Section 2 recaps Dékány and Georgieva's proposal. In Section 3, I then try to apply their model to Poshkart Chuvash data, with the main bulk of the section dedicated to the syntactic status of nominalized complements, as a more contentious question that I ultimately leave open for now. In Section 4, I extend the covert noun analysis to comparative clauses and also discuss outstanding questions and possible alternative accounts. Section 5 concludes the paper.

2. Theoretical background: Participle-nominalizer polysemy

The pattern exemplified by Chuvash, wherein the same suffix (or other such morphosyntactic device) appears both in forms heading adnominal clausal constructions and in deverbal nominalizations occupying argument positions (6), is wide-spread in the languages of the world [Koptjevskaja-Tamm 1993: 43–44; Noonan 1997; Serdobolskaya, Paperno 2006; Shagal 2019: 41–44; inter alia].

(6) a. $[_{VP}\ [_{nominalization}$ V-***sfx***] matrix-V] (nominalization)

b. $[_{DP}\ [_{relative}$ V-***sfx***] N] (relative)

Most recently, [Dékány, Georgieva 2020, 2021] have argued that such cases should not be viewed as disconnected instances of accidental homonymy, but rather call for a principled, structure-based account. They argue that this pattern,

which they label “participle-nominalizer polysemy” for convenience (although no polysemy as such is involved), arises when the structure of deverbal nominals (henceforth DVNs) properly contain those of participial relative clauses (henceforth pRCs). This may happen in various configurations, depending on a few parameters.

The first analytical ramification to consider is whether the shared suffix spells out a functional head in the extended VP or a nominalizing head that selects an extended VP as its complement. In the latter option, the “nouny” character of the suffix provides straightforward explanation of its use in DVNs, yet forces us to posit that for whatever reason, pRCs cannot directly modify nouns and need to undergo nominalization (yielding a mixed extended projection in terms of [Borsley, Kornfilt 2000]) before being merged in adnominal position.

I see at least three arguments to reject this particular line of analysis for Poshkart Chuvash[3]. First, it suggests more structure precisely where we see less overt morphology, and vice versa (cf. possessive marking in (5) *vs.* lack thereof in (4a–b)). Second, as we shall see in the next section, there is no independent evidence for nominalized status of participial relatives. Finally, the forms marked with *-nə* can appear as predicates of independent clauses (7), suggesting that the suffix merges at a verbal extended projection hosting temporal/aspectual information:

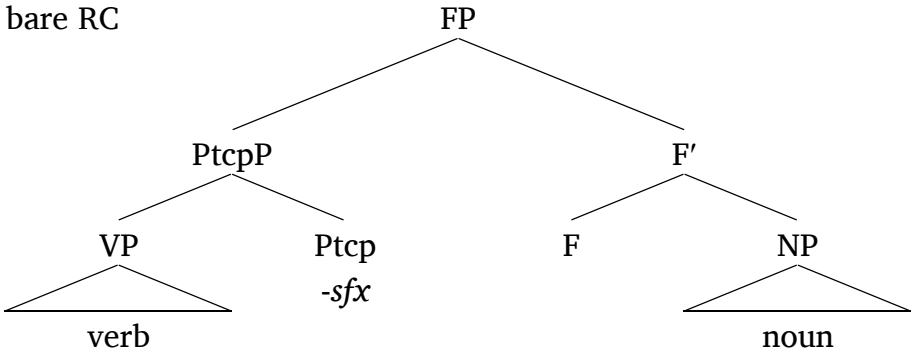
(7) *vaçа-ba* *petʲa* *kugəlʲ* *pëʑer-**në***
Vasja-INS Petja pie cook-PC_PST
‘Vasja and Petja baked some pies.’

Assuming that the shared suffix expones a “verby” head, two further parameters come in play. First, RCs may modify nouns directly or undergo nominalization (as it was obligatory under the “nouny” option sketched above). See the tree diagrams in (8), adopted from [Dékány, Georgieva 2021], where Ptcp is the head in the extended VP spelled out by the morpheme under consideration and FP is a functional projection within the extended NP responsible for the composition of the pRC and its head noun[4]. (8b) only differs from (8a) in the presence of an additional nominal layer between PtcpP and FP:

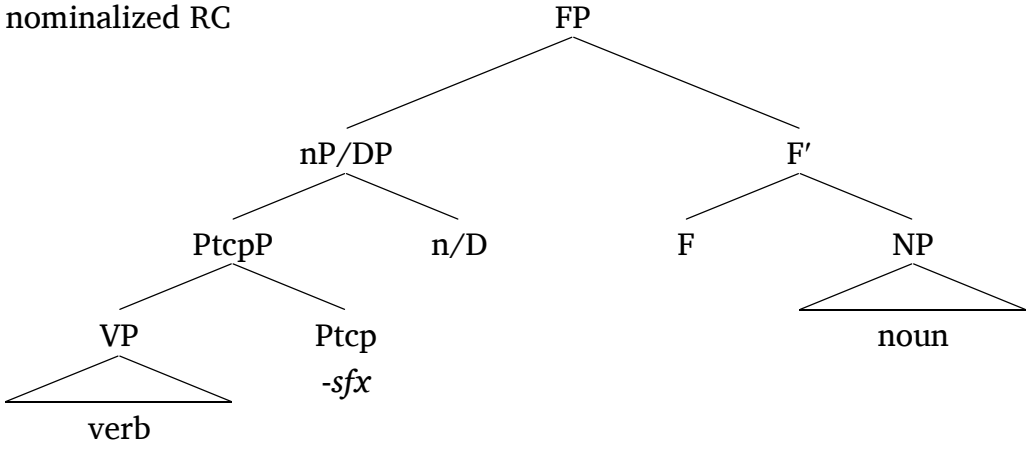
[3] Dékány and Georgieva also do not find any instantiations of this type among Turkic and Uralic languages they have studied. Some of the languages surveyed in [Shibatani 2009] seem like fitting candidates, but more research is needed.

[4] Note that this parameter is absent from [Dékány, Georgieva 2020] and has only been introduced in [Dékány, Georgieva 2021]. In this latter work, the projection in question is labeled AspP instead of PtcpP, but the designation is again conventional: nothing in the proposed analysis hinges on the precise identity of this projection.

(8) a. bare RC



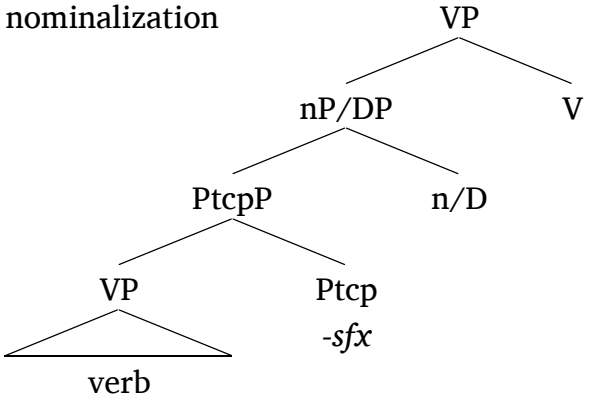
(8) b. nominalized RC



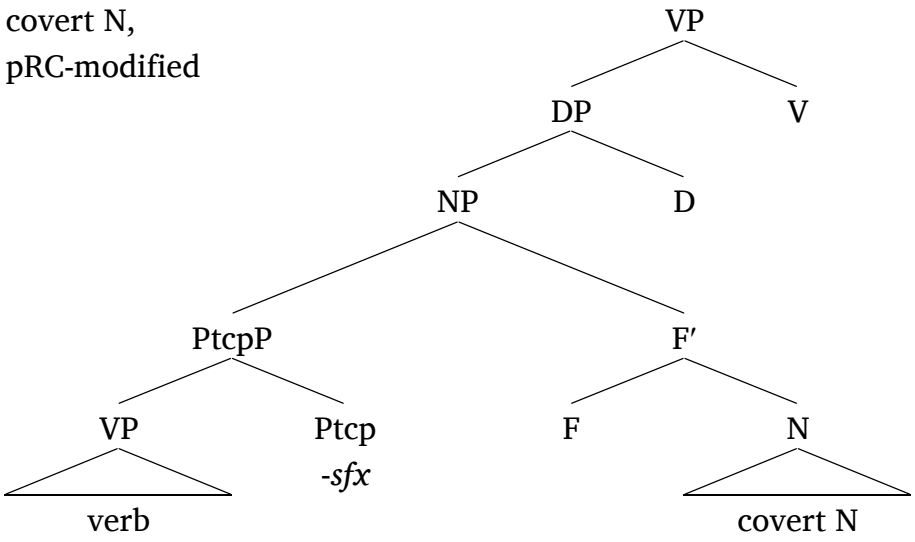
RC nominalization need not be overtly marked. It is evidenced by nominal properties displayed by the RC: Genitive marking on the subject, obligatorily possessive morphology, determination, availability of pluralization, etc.

The second parameter deals with the nature of the "nouny" element that distinguishes DVNs from RCs and gives the former their nominal distribution. This can be either a functional head like n or D, making a DVN a mixed extended projection (9a), or a covert lexical noun that takes PtcpP as a clausal modifier/complement (9b–c). The latter type can be diagnosed by the alternation between overt and covert nouns or by the presence of over light nominals.

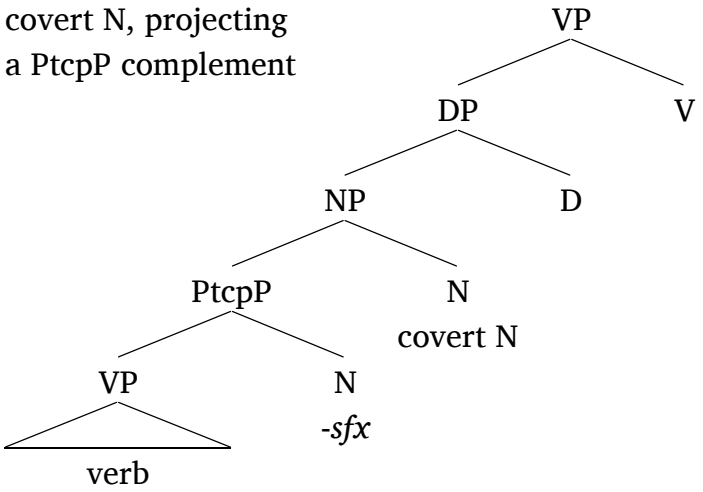
(9) a. nominalization



(9) b. covert N, pRC-modified



(9) c. covert N, projecting a PtcpP complement



The interaction of these two binary parameters (bare *vs.* nominalized pRCs; mixed extended projections *vs.* covert nouns in DVNs) produces three principal configurations wherein participle-nominalizer polysemy can arise: (i) bare pRCs and mixed extended projections in DVNs (Kazakh, Udmurt); (ii) mixed extended projections in both pRCs and DVNs (Modern Standard Turkish); (iii) bare pRCs and DVNs projected from a nominal head, covert (Uyghur) or overt (Korean, Kazym Khanty). The fourth logically possible type is not expected to be attested, since if a language has mixed extended projections in relative clauses, nothing should prevent them from appearing in argument positions [Dékány, Georgieva 2021]. So, what place do Chuvash *nə*-forms occupy in the proposed typology and what consequences does it have for comparative constructions with participial standards?

3. Participle-nominalizer polysemy in Chuvash

3.1. Towards an analysis

The status of Poshkart Chuvash pRCs does not appear to pose any problems, as they do not bear any formal trappings of nominalization. The argument marking scheme of main clauses is retained[5], as illustrated in examples (4a–c) above. No possessive or D-like marking is involved, either: when an explicit nominal head is present, a 3rd person possessive maker may attach to it, but not to the participle itself. I thus conclude that the structures in question are bare pRCs that directly compose with their head nouns via a dedicated functional projection. The same morphological profile is characteristic of participial complements selected by content nouns such as *sazə* 'rumor', *xəbar*, *novəç* 'news', etc. [Logvinova 2019b; forthc.].

The situation with DVNs in complement clauses is less straightforward, as is often the case (cf. competing analyses of Turkish data in [Lees 1965; Aygen 2002, 2011; Kornfilt 2003; Kornfilt, Whitman 2011; Dékány, Georgieva 2021; a.o.]). Past Participle forms used in such structures differ from those in relative clauses in the obligatory presence of the 3rd person possessive suffix[6]:

(10) *vəl* *kaj-**n**-**(i) *terës* *mar*
s/he go-PC_PST-P_3 true NEG_ASCR
'That s/he has left is not true.'

It must be noted that in Poshkart Chuvash, the system of possession marking has largely decayed; only the 3rd person marker remains fully productive and it has developed an array of determiner-like uses beyond its original function [Logvinova 2019a]. That in the case of DVN complements we are not dealing with possession or agreement, is clearly evidenced by examples like (11), where the 3rd person possessive suffix appears on the participle despite its subject being the 2nd person:

---

[5] In fact, genitive-marked subjects in pRCs are allowed by a distinct minority of speakers, but this seems to be an ideolectal ideosyncrasy.

[6] Somewhat unexpectedly, omission of the possessive suffix appears acceptable (or even preferable), at least for some speakers, in DVNs marked with the causal case:

(i) *jep* *xər-a-p* *vəl* *yg-**n**-(**i**)-ʐën*
I be.afraid-NPST-1SG s/he fall-PC_PST-P_3-CSL
'I am afraid that s/he will fall.'

This may be connected to the adverbial rather than argument status of the clauses in question, but further study is required. I isolate this case as exceptional and postpone the explanation for the future.

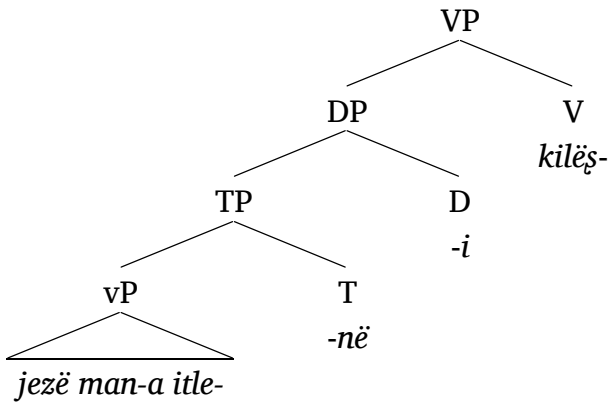
(11) *jezë* *man-a* *itle-**n-i*** *kil-ëẓ-et*
you I.OBL-OBJ listen-PC_PST-P_3 come-REC-NPST[3SG]
‘(I) like it that you listen to me.’

It thus appears tempting to assume that the possessive suffix on DVNs spells out precisely the D head that tops the PtcpP projection without an intermediate nominal layer and is responsible for the overall nominal distribution. Since all participial clauses discussed in this section have nominative subjects and also may contain various light verbs expressing an array of aspectual meanings, cf. (12), the Ptcp head must be located fairly high within the extended VP, enabling the PtcpP to retain a significant amount of clausal structure.

(12) *vəl* *kaj-z=**er-n-i*** *terës* *mar*
s/he go-CV_SIM=AUX-PC_PST-P_3 true NEG_ASCR
‘That s/he has left is not true.’

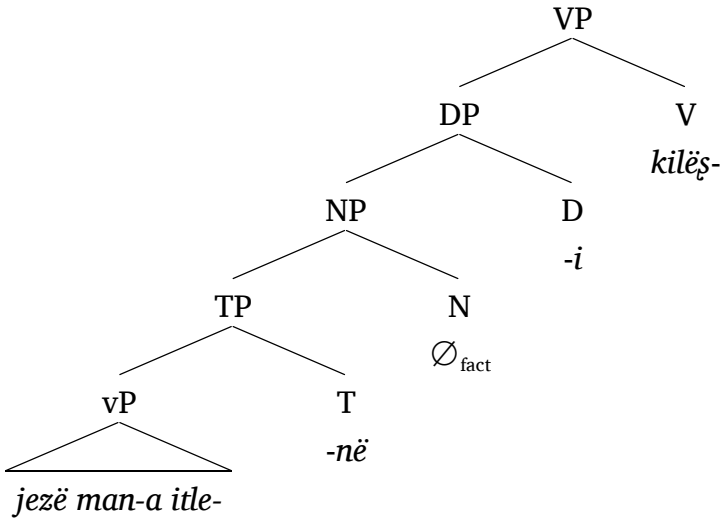
We may thus tentatively equate PtcpP with TP, the layer where the subject DP receives its nominative case exempting it from the need to raise further to Spec, DP. This makes sense, given that participial main clauses such as (7) can only refer to the past. Taken together, these assumptions result in the following structure for (11):

(11’)



The second possibility to consider is that Poshkart Chuvash DVNs are able to fulfill argument positions by virtue of being headed by covert nouns with abstract meanings such as ‘fact’, ‘news’, ‘event’, etc. As [Logvinova 2019b; forthc.] shows, *nə*-marked participial clauses combining with overt content nouns are categorically different from true pRC, despite superficial similarity and a number of shared properties. Consequently, covert nominal heads must likewise occur in a complement configuration (9c), rather than a relative clause configuration (9b). We thus arrive at the following alternative structure:

(11'')



How to choose between the two competing hypotheses in (11') and (11'')? In the following three sub-sections I will review different diagnostics pro and contra the covert noun analysis proposed in the literature and apply them to Poshkart Chuvash data.

3.2. Alternation between covert and overt nominal heads

The primary diagnostics for the presence of covert nominal heads used by [Dékány, Georgieva 2020, 2021] is the possibility of inserting an overt noun after the participle. This "overt head noun test" has been used in [Asarina, Hartman 2011] for Uyghur:

(13) Uyghur [Asarina, Hartmann 2011: 24]

a. *Ötkür* [*Tursun-niŋ tamaq yi-gen*]*-i-ni bil-i-du / di-d-i*
Ötkür Tursun-GEN food eat-PC_PST-P_3-ACC know-IMPF-3 say-PST-3
'Ötkür knows/said that Tursun ate food.'

b. *Ötkür* [*Tursun-niŋ tamaq yi-gen*] ***heqiqet****-i-ni bil-i-du / di-d-i*
Ötkür Tursun-GEN food eat-PC_PST fact -P_3-ACC know-IMPF-3 say-PST-3
'Ötkür knows/said the fact that Tursun ate food.'

For Poshkart Chuvash, the condition holds, but with a caveat. Compare (5) (repeated below as (14a)) *vs.* (14b–c):

(14) a. *vəl kaj-**n-i** man-a pəʐərgan-dar-ʧ-ə*
s/he go-PC_PST-P_3 I.OBL-OBJ get.sad-CAUS-PST-3SG
'That s/he has left saddened me.'

b. *vəl* *kaj-**nə*** ***novəç*** *man-a* *pəʐərgan-dar-tɕ-ə*
s/he go-PC_PST news I.OBL-OBJ get.sad-CAUS-PST-3SG
'The news that s/he has left saddened me.'

c. *vəl* *kaj-**nə*** ***fakt*** *man-a* *pəʐərgan-dar-tɕ-ə*
s/he go-PC_PST fact I.OBL-OBJ get.sad-CAUS-PST-3SG
'The fact that s/he has left saddened me.'

As we can see, the P_3 marker is in complementary distribution with overt nominal heads (again, idiolectal fluctuations exist, but the default pattern is as illustrated in (14)). This is in contrast to both Uyghur, where either the head noun or the participle bears the possessive suffix (13), and Turkish, where the possessive agreement obligatorily manifests on the participle regardless of the presence of an overt noun [Kornfilt 2003: 181]. Thus, (14b–c) differ from (14a) in more than just addition of an overt noun, which casts doubt over the possibility of assigning the same structure to them.

Given that possessive marking on participles in Poshkart Chuvash is not a manifestation of agreement, can we still explain its appearance in examples like (14a) assuming a zero head noun structure for them? As [Logvinova 2019a: 89–93] shows, similar distribution of possessive marking is found in most other cases of alternation between an overt noun and lack thereof, including nominal ellipsis (15a–b), although the degree of obligatoriness varies from context to context. She even identifies "zero nominal head marking" («маркирование нулевой именной вершины») as one of non-possessive functions of the suffix in question.

(15) a. *simës* / **simës-**i*** / **simëz-**ë***[7] *olma*
green green-P_3 green-P_3 apple
'green apple'

b. *xërlë* *olma* *tutlə,* *simës* / *simës-**i*** / *simëz-**ë*** *tutlə* *mar*
red apple tasty green green-P_3 green-P_3 tasty NEG_ASCR
'The red apple tastes good, the green one doesn't taste good.' [Logvinova 2019a: 90]

It is, however, not clear what category the P_3 suffix may represent in such uses. That it expones a D head still remains the most plausible possibility, but this removes the need for a covert noun to account for the nominal distribution, bringing us back to a structure more akin to (11').

[7] See [Logvinova 2019a: 98–99, 113–121] on the distribution of different variants of the P_3 suffix.

Another non-possessive function of *-i/-ə* in Poshkart Chuvash is the selection of a member from a previously established set [Logvinova 2019a: 106–107]. One could, in principle, hypothesize that the presence of possessive marking in (14a) as opposed to (14b–c) is due to a peculiarity of the lexical semantics of the covert nominal involved: the latter refers to propositional entities of a different kind than those referred to by overt nouns like *fakt* and *novəɕ*, of a kind such that a set of them is always present and salient in discourse. It is unclear, however, what kind of entities this might be, especially given the wide range of proposition-selecting predicates that may have participial complements.

3.3. Differences in distribution

Differences in distribution between overt nominal heads and their presumed covert counterparts can be construed as an argument against positing the latter. Thus, [Asarina, Hartman 2011: 24] emphasize that in Uyghur it is always possible to substitute a null head with an overt noun, while [Dékány, Georgieva 2020: 195] note that an analysis relying on phonologically null nouns with idiosyncratic selectional properties lacks a solid empirical foundation. Differences in distribution may come in two flavors: either (i) there are environments where an overt noun can not be inserted/restored after the participle; or (ii) there are environments where an overt noun is obligatory and can not be omitted.

I find the first type of cases unrevealing, because unavailability of a suitable overt noun can be due to a gap in the lexicon, rather than any difference in structure. Poshkart Chuvash, in particular, does not have semantically bleached all-purpose nouns such as Korean *kes* [Horie 2000; Kim 2009] or Kazym Khanty *wɛr* [Starchenko 2019]; neither *jabala* ‘thing’ or *ëɕ* ‘work, deed’ can be used in this manner:

(16) **vəl dok-sa gaj-**nə** **jabala** / **ëɕ** jabəx*
s/he exit-CV_SIM go-PC_PST thing work bad
Int.: ‘That s/he has left is bad.’

In languages like this, speakers need to select a specific noun with appropriate lexical semantics for each matrix predicate and in particular cases an appropriate overt noun may simply be missing. Note that some purist-minded speakers of Poshkart Chuvash disprefer examples like (14c) precisely because they do not acknowledge the Russian borrowing *fakt* as part of their Chuvash vocabulary — and there doesn’t appear to be a native noun with quite the same meaning. Covert nominal lexemes, on the other hand, can be reasonably ex-

pected to have a more abstract semantics[8] and thus be suitable for environments in which no appropriate overt noun is available.

Cases of type (ii), where an overt noun is obligatory, are more of interest. For example, Turkish DVNs (specifically, the so-called "factive gerunds" in *-tIk*, roughly analogous to Chuvash *nə*-forms and glossed below as past participles) can not appear as subjects of emotive predicates, while overt nouns with nominal complements can, contrast (17a–b) with (18a–b):

(17) Turkish [Kornfilt 2003: 181]

a. *Ben* [*Hasan-ın gel-diğ-in*]*-i* *bil-iyor-um.*
I Hasan-GEN come-PC_PST-P_3-ACC know-PROG-1SG
'I know that Hasan came.'

b. *Ben* [*Hasan-ın gel-diğ-i*] ***gerçeğin-i*** *bil-iyor-um.*
I Hasan-GEN come-PC_PST-P_3 fact-ACC know-PROG-1SG
'I know the fact that Hasan came.'

(18) Turkish [Kornfilt 2003: 187, 188]

a. *[*Ali-nin ev-den kaç-tığ-ı*] *ben-i üz-dü.*
Ali-GEN house-ABL flee-PC_PST-P_3 I-ACC sadden-PST
Int.: 'Ali's running away from home saddened me.'

b. [*Ali-nin ev-den kaç-tığ-ı*] ***söylenti-si*** *ben-i üz-dü.*
Ali-GEN house-ABL flee-PC_PST-P_3 rumor-P_3 I-ACC sadden-PST
'The rumor of Ali's running away from home saddened me.'

Arguments of truth-value predicates are another suspicious environment. [Moulton 2020] argues that a number of matrix predicates such as 'true'/'false'/'believe' select individuals and eventualities with propositional content rather than propositions per se, and since reference to such objects can only be provided by content nouns, these predicates can not take mixed extended projections as their arguments. Consequently, one would expect DVNs either to be incompatible with truth-value predicates or to be projected from covert content nouns[9].

[8] This is not, however, what is argued for Uyghur by Asarina and Hartmann [2011], who suggest a one-to-one correspondence in meaning between overt and covert head nouns.

[9] It must be noted, however, that K. Moulton limits his claim to Indo-European languages like Spanish or English and remains agnostic about its wider applicability. As Dékány and Georgieva [2021] themselves acknowledge, truth-value predicates in Turkish, unlike emotive verbs, can take DVN subjects [Kelepir 2001: 14; Göksel, Kerslake 2005: 116, 367].

No such discrepancies in the distribution of overtly headed *vs.* superficially headless participial clauses are found in Poshkart Chuvash. In particular, *nə*-forms unaccompanied by overt head nouns can freely function as subjects of both emotive predicates and truth value predicates, as has already been shown in (5) and (10) respectively.

3.4. Differences in scrambling options

The analysis in terms of covert nominal heads predicts that the presence or absence of an overt noun will have no effect on the possibilities of scrambling out of the participial clause. As [Kornfilt 2003: 183–186] demonstrates, this is not the case in Turkish. Despite its relatively strict verb-final order, most speakers of Modern Standard Turkish find right extraposition of a backgrounded constituent out of an embedded factive clause somewhat acceptable (19a), but addition of an overt nominal head degrades the example significantly (19b):

(19) Turkish [Kornfilt 2003: 184]

a. ?[*Hasan-ın* t_i *nihayet kaç-tığ-ın*]-ı *duy-du-m* *karı-sın-dan*$_i$
Hasan-GEN finally flee-PC_PST-P_3-ACC hear-PST-1SG wife-P_3-ABL
'I heard that Hasan finally ran away from his wife.'

b. ??/*[[*Hasan-ın* t_i *nihayet kaç-tığ-ı*] ***söylenti-sin***]-*i*
Hasan-GEN finally flee-PC_PST-P_3 rumor-P_3-ACC

duy-du-m *karı-sın-dan*$_i$
hear-PST-1SG wife-P_3-ABL
Int.: 'I heard that Hasan finally ran away from his wife.'

This contrast is even more pronounced when the entire argument clause is extraposed to a post-verbal position (the possibility of which J. Kornfilt considers to be in itself problematic for the covert noun analysis):

(20) Turkish [Kornfilt 2003: 185, 186]

a. t_j *Duy-du-m* [[*Hasan-ın* t_i *nihayet* *kaç-tığ-ın*]-*ı*]$_j$ *karı-sın-dan*
hear-PST-1SG Hasan-GEN inally flee- PC_PST-P_3-ACC wife-P_3-ABL
'I heard that Hasan finally ran away from his wife.'

b. ??/*t_j *Duy-du-m* [[*Hasan-ın* t_i *nihayet* *kaç-tığ-ı*] ***söylenti-sin-i***]$_j$
hear-PST-1SG Hasan-GEN finally flee- PC_PST-P_3 hear-PST-1SG

karı-sın-dan$_i$
wife-P_3-ABL
Int.: 'I heard that Hasan finally ran away from his wife.'

The same effect does not obtain in Poshkart Chuvash, which, being in an intense contact with Russian, generally has a less rigid word order than Turkish. Speakers vary considerably in their evaluation of examples similar to (19)–(20), but unanimously find them less preferrable than corresponding sentences without scrambling out of the *nə*-clause. Most importantly, presence of an overt noun does not visibly affect their judgements:

(21) a. t_j *man-a* *xərat-s=er-tɕ-ë*
I.OBL-OBJ frighten-CV_SIM=AUX-PST-3SG

[*ëner* *jal-a* *politsë* *kil-n-i*]$_j$
yesterday village-OBJ police go-PC_PST-P_3
'I was frightened by the police coming to the village yesterday.'

b. ??t_j *man-a* *xərat-s=er-tɕ-ë*
I.OBL-OBJ frighten-CV_SIM=AUX-PST-3SG

[*ëner* t_i *politsë* *kil-n-i*]$_j$ *jal-a*
yesterday police go-PC_PST-P_3 village-OBJ
'I was frightened by the police coming to the village yesterday.'

c. ??t_j *man-a* *xərat-s=er-tɕ-ë*
I.OBL-OBJ frighten-CV_SIM=AUX-PST-3SG

[[*ëner* t_i *politsë* *kil-në*] *xəbar*]$_j$ *jal-a*
yesterday police go-PC_PST-P_3 news village-OBJ
'I was frightened by the news of the police coming to the village yesterday.'

It must be noted that while word order in Turkish has been studied extensively (see e.g. [Özsoy 2019] and references therein), little is known yet about Poshkart Chuvash in this regard. Options for scrambling out of complement clauses merit a more systematic study in the future.

3.5. Section summary

In this section, I tried to locate the Poshkart Chuvash case of participle-nominalizer polysemy within the hypothesis space laid out in [Dékány, Georgieva 2020, 2021]. It has to be admitted that while the bare, non-nominalized status of Poshkart Chuvash pRCs can be established with certainty, available evidence is inconclusive as to the analysis of DVNS in complement clauses. Applicable diagnostics mostly point towards the presence of covert nominal heads, but the observed distribution of possessive marking presents problems for this solution,

being more in line with the account in terms of mixed extended projections. I now turn to comparative clauses with participial standards, still bearing both strands of analysis in mind.

4. Comparative clauses

4.1. More on participial standards

As has already been shown in the Introduction, the same past participial form that unites relative and complement clauses in Poshkart Chuvash also appears in standards of comparison when those contain an extended verbal projection. One notable fact is that in comparative clauses, in contrast to relatives, this same form is used uncontestedly, regardless of the temporal reference. Consider the following set of examples:

(22) a. {Context: A new worker has been added to your brigade, who turned out to be grossly incompetent. Commenting on this the next day, you say:}
*vəl ënər numaj-rak mëʂet-le-r^{j}-ë poləʂ-**n**-in-ɖʐen*
he yesterday many-CMPR hinder-VBLZ-PST-3SG help-PC_PST-P_3-ABL
'Yesterday he hindered (us) more than he helped.'

b. {Context: A new worker has been added to your brigade, who turned out to be grossly incompetent. A passer-by asks you about his performance. You say:}
vəl xal^{j} numaj-rak mëʂet-l-et
he now many-CMPR hinder-VBLZ-NPST[3SG]

*poləʂ-**n**-in-ɖʐen / #poləʐ-**agan**-ën-ɖʐen / *poləʐ-**agan**-ɖʐan*
help-PC_PST-P_3-ABL help-PC_PRS-P_3-ABL help-PC_PRS-P_3
'He now hinders (us) more than he helps.'

c. {Context: A new worker is proposed to join your brigade, whom you know to be unskilled in the kind of work planned for tomorrow. You object to it saying:}
vəl iran për-e numaj-rak mëʂettu-at
he tomorrow we-OBJ many-CMPR hinder do-NPST[3SG]

*poləʂ-**n**-in-ɖʐen / #poləʐ-**agan**-ën-ɖʐen / *poləʐ-**agan**-ɖʐan /*
help-PC_PST-P_3-ABL help-PC_PRS-P_3-ABL help-PC_PRS-P_3

poləʐ-az**-ën-ɖʐen / *poləʐ-**as**-ran*
help-PC_FUT-P_3-ABL help-PC_FUT-ABL
'Tomorrow he will hinder us more than he will help.'

In (22b), like in (22a), only the past participle can be used, although the standard of comparison involves a situation ongoing in the present. Likewise, neither the present nor the future participle is a possible substitute for the past participle in (22c)[10], despite the future temporal reference.

Bearing ablative case marking, participial standards of comparison show nominal distribution (compare ex. (3) and (22a–c) with (1)–(2) involving DP standards). Pursuing the hypothesis that use of past participles in relative, complement and comparative clauses is due to shared underlying structure, we are led to view participial standards as DVNs and are faced with the question whether they are best treated as mixed extended projections or as complements to covert nouns.

4.2. A parallel from Japanese

An analysis of comparative clauses in terms of covert nominal heads has been proposed for Japanese in [Sudo 2009, 2015]. The author notices that constructions with *-yori* (23a), previously often viewed as clausal comparatives [Hayashishita 2009; Shimoyama 2012; inter alia], allow for insertion of overt degree (23b) or content nouns (23c) that take the preceding clause as a modifier:

(23) Japanese [Sudo 2015: 8]

a. *John-wa* [*Bill-ga* *katta*] *-yori* *takusan* *hon-o* *katta*
John-TOP Bill-NOM bought than many book-ACC bought
'John bought more books than Bill bought.'

b. *John-wa* [*Bill-ga* *katta* ***ryoo***] *-yori* *takusan* *hon-o* *katta*
John-TOP Bill-NOM bought amount than many book-ACC bought
'John bought more books than the amount (of books) that Bill bought.'

c. *John-wa* [*Bill-ga* *katta* ***hon***] *-yori* *takusan* *hon-o* *katta*
John-TOP Bill-NOM bought book than many book-ACC bought
'John bought more books than the books that Bill bought.'

[10] Versions of (22b–c) with *poləẓ-agan-ën-ɗ̡en* 'help-PC_PRS-P_3-ABL' are in fact acceptable, but with a diffeкent meaning that requires a rather specific context: 'He hinders/will hinder us more than the one who helps' (presupposing existence and unique identifiability of the latter referent). While present participles in *-AgAn* are capable of targeting the same wide range of grammatical relations as past participles, in the corpus they show great preponderance for subject relativization. In the Chuvash variety under study, the so-called future participles in *-As* never appear in relative clauses, being confined to sentential complements and a few modal constructions [Logvinova, forthc.].

Y. Sudo further argues that constructions like (23a) are derived from underlying structures similar to (23b–c) via head ellipsis licensed by (incomplete) morphological identity and provides a number of empirical arguments in favor of this claim.

(23') Japanese (adopted from [Sudo 2015: 9])

b. *John-wa* [*Bill-ga* *katta* ~~*ryoo*~~] *-yori* ***takusan*** *hon-o* *katta*
John-TOP Bill-NOM bought amount than many book-ACC bought
'John bought more books than Bill bought.'

c. *John-wa* [*Bill-ga* *katta* ~~*hon*~~] *-yori* *takusan* ***hon-o*** *katta*
John-TOP Bill-NOM bought book than many book-ACC bought
'John bought more books than Bill bought.'

Thus, what may superficially look like a finite clause introduced by a comparative conjunction is shown to be a DP with a clausally modified head deleted under ellipsis. The primary piece of evidence, summarized in (23a–c) is very much like the overt head noun test discussed in 3.2 above.

As we shall see shortly, Poshkart Chuvash participial comparatives also permit insertion of an overt degree noun (cf. (24a–b) below). Both Japanese and Chuvash have morphologically productive suffixes (*-sa* [Sudo 2015: 11–12] and *-lək*, *-əʂ*, respectively) that derive degree nouns from gradable predicates, thus there is no shortage of possible overt heads in comparative constructions.

Superficial similarities notwithstanding, the Japanese data that motivate Sudo's analysis differ from those of Poshkart Chuvash in a number of important respects. First, in Japanese there is a nearly total homonymy between the past tense form and the adnominal form used in relative clauses, which made it possible to put forth both clausal and phrasal accounts of comparatives introduced by *-yori*. Relevant Chuvash standards wear their non-finite nature on their sleeve: the verb is unambiguously in a participial form and further attaches nominal morphology. Second, with respect to a number of phenomena, standards of comparison in Japanese pattern together with relatives and only with relatives, excluding formally identical complement clauses. In Chuvash, we are concerned with a three-way polyfunctionality between adnominal, complement and comparative uses of past participles and there are no similar phenomena that would set one type of clauses apart from the other two. Finally, there is no independent evidence for the existence of headless relative clauses in Japanese,

which is one of the reasons behind Sudo's reliance on head ellipsis[11], while Chuvash makes ample use of headless relatives. It thus does not appear reasonable to just import Sudo's analysis for Chuvash. Still, the Poshkart Chuvash data fit well into a version of a covert head noun analysis.

4.3. Invisible nominal heads in Poshkart Chuvash comparatives

Crucially, as has been mentioned previously, in Poshkart Chuvash participial comparatives it is possible to insert (or reinstate) an overt degree noun:

(24) a. *jes* *tɕəm-**n-in-ʤen*** *tëp* *tarən-rax*
you dive-PC_PST-P_3-ABL bottom deep-CMPR
'The bottom lies deeper than you have dived.'

b. *jes* *tɕəm-**nə*** ***tarənəʐ-ën-ʤen*** *tëp* *tarən-rax*
you dive-PC_PST depth-P_3-ABL bottom deep-CMPR
'The bottom lies deeper than the depth you have dived to.'

The parallelism between (24a) and (24b) is even greater than that between overtly headed (14b–c) and superficially headless (14a) participial complement clauses discussed in section 3.2, as the possessive suffix marks standards of comparison in both examples. The obligatory presence of possessive marking in (24b) easy receives straightforward semantic explanation. The comparative operator picks up a specific degree on the scale of depth (the maximal degree such that the Addressee have reached it in their dive) out of a contextually salient interval on the scale of depth. The possessive marker here thus fulfills its function of selecting a member from a set, mentioned at the end of section 3.2 above.

Variants like (24a) and (24b) appear identical in their semantics and distribution. Notably, Poshkart Chuvash does not show contrasts of the kind reported in [Bylinina 2017: 461–462] for Mishar Tatar:

(25) Mishar Tatar [Bylinina 2017: 461–462]
a. *ul* *min* *äjt-**kän*** ***nɤrma-dan*** *küp-räk* *aš-a-dɤ*
he I say-PC_PST-P_3 norm-ABL many-CMPR eat-ST-PST
'He ate more than (the norm that) I told him.'

[11] [Beck et al. 2004] analyze complements of *-yori* as headless relatives that are limited in distribution to only compative clauses for some syntactic reasons. Their account, however, runs into serious empirical problems, as shown in [Shimoyama 2012: 88–90; Sudo 2015: 37–38].

b. ??*ul* *min* *äjt-**kän-nän*** *küp-räk* *aš-a-dɤ*
he I say-PC_PST-ABL many-CMPR eat-ST-PST
'He ate more than I told him.'

Dropping the parametric noun in (25a) degrades the example (25b), which is unexpected under the assumption that covert nominal heads are generally available in participial standards of comparison. While E. Bylinina ultimately leaves open the question whether comparatives in Mishar Tatar shall be treated along the lines proposed by [Sudo 2009], she notes that pairs like (25a–b) pose a problem for such an analysis. No such pairs are found in Poshkart Chuvash.

It thus seems natural to assume that (24a) is structurally identical to (24b), the only difference being that in the former case the nominal head is covert. This results in the following (simplified) structure for the standard in (24a)[12]:

(24') $[_{DP}\ [_{FP}\ [_{TP}[_{vP}$ *jes tɕəm*]-$_{T}$***nə***] $_{F'}[_{NP}\ \varnothing]]$]-$_{D}$*in*]-*dʑen tëp tarən-rax*

Two questions remain, however: (i) what is the precise nature of the covert nominal element in (24') and (ii) how does this analysis fare against the competing account in terms of a mixed extended projection? I will discuss these in the following two subsections, in both cases tentatively suggesting directions for further investigation, rather than binding myself to a definite answer.

4.4. Nature of the covert noun

With respect to the first question, three options are possible. First, participial standard in (24a) may simply involve head ellipsis of an appropriate degree noun, licensed by the cognate gradable predicate in a higher position, as in Sudo's [2015] analysis for Japanese. Second, it can be headed by a covert degree noun $\varnothing_{\text{depth}}$, in free alternation with its overt counterpart *tarənəş* 'depth', in the spirit of Asarina and Hartmann's [2011] account of Uyghur complement and adverbial clauses. Third, it can be headed by a covert abstract parametric noun $\varnothing_{\text{deg}}$ denoting an operator that takes a specification of a gradable scale and returns a set of degrees on that scale. The three options are schematically summarized below[13]:

---

[12] Since *tarənəş* 'depth' is an oblique argument of *tɕəm-* 'dive', we are dealing with relative, rather than nominal complement structure here.

[13] An essentially similar triad of options is conceivable for attributive comparatives of the kind 'The girl was given a more interesting book than the one/book that the boy has read', the only difference being that the deleted/covert nouns must denote individuals rather than degrees (including the assumed $\varnothing_{\text{thing}}$ covert abstract lexeme). I haven't studied this class of examples systematically, however, and won't focus on them here.

(26) a. [$_{DP}$ [$_{FP}$ [$_{TP}$[$_{vP}$ *jes tɕəm*]- $_{T}$***nə***] $_{F'}$[$_{NP}$ ~~*tarənəs*~~]]- $_{D}$*in*]-*dʑen tëp* ***tarən****-rax*

b. [$_{DP}$ [$_{FP}$ [$_{TP}$[$_{vP}$ *jes tɕəm*]- $_{T}$***nə***] $_{F'}$[$_{NP}$ $\varnothing_{depth}$]]- $_{D}$*in*]-*dʑen tëp tarən-rax*

c. [$_{DP}$ [$_{FP}$ [$_{TP}$[$_{vP}$ *jes tɕəm*]- $_{T}$***nə***] $_{F'}$[$_{NP}$ $\varnothing_{deg}$]]- $_{D}$*in*]-*dʑen tëp* ***tarən****-rax*

The second solution is utterly implausible, because it posits a considerable number of different phonologically unrealized nouns with rather specific semantic content. The choice between head ellipsis and a covert generic degree noun is a tricky matter, however, because predictions of the two approaches are rather similar. Just like the former option requires a gradable predicate in a c-commanding position to license deletion, the latter requires it for $\varnothing_{deg}$ to get its interpretation from. The scale to which $\varnothing_{deg}$ applies can not be calculated based on its participial modifier alone, because formally identical pRCs may appear in different comparative contexts denoting different standards of comparison:

(27) a. *atɕa kozʟak-pa* [*jɨdə-ba* *vɨlʲa-n-in-dʑen*] *numaj-rak* *vɨlʲ-at*
child cat-INS dog-INS play-PC_PST-P_3-ABL many-CMPR play-NPST[3SG]
'The child plays with the cat more than (s/he plays) with the dog.'

b. *atɕa kozʟak-pa* [*jɨdə-ba* *vɨlʲa-n-in-dʑen*]
child cat-INS dog-INS play-PC_PST-P_3-ABL

numaj-rak *vɨlʲa-ma* *jurad-at*
many-CMPR play-INF love-NPST[3SG]
'The child likes playing with the cat more than (s/he likes playing) with the dog.'

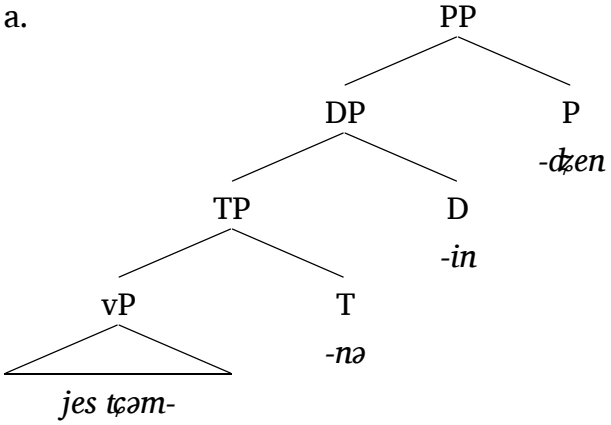
In (27a), it is the amount of time spent playing with the dog that is compared to, while in (27b), the level of enjoyment of such play, although in both examples the standard phrase looks the same. If it is indeed composed as [[*jɨdə-ba vɨlʲa-nə*] [$\varnothing_{deg}$]-*in*]-*dʑen* in both cases, we must admit that $\varnothing_{deg}$ cannot take its reference from the pRC and must rely on material elsewhere in the clause for interpretation.

The choice between the head ellipsis account and the covert generic degree noun account thus runs into a much broader question of how the semantics of comparison is calculated in phrasal comparatives under investigation and what denotation for the comparative operator [Hochaus, Bochnak 2020] best fits the Poshkart Chuvash data. This choice can not be made solely on the basis of syntactic evidence, and I must leave it for a future semantic study.

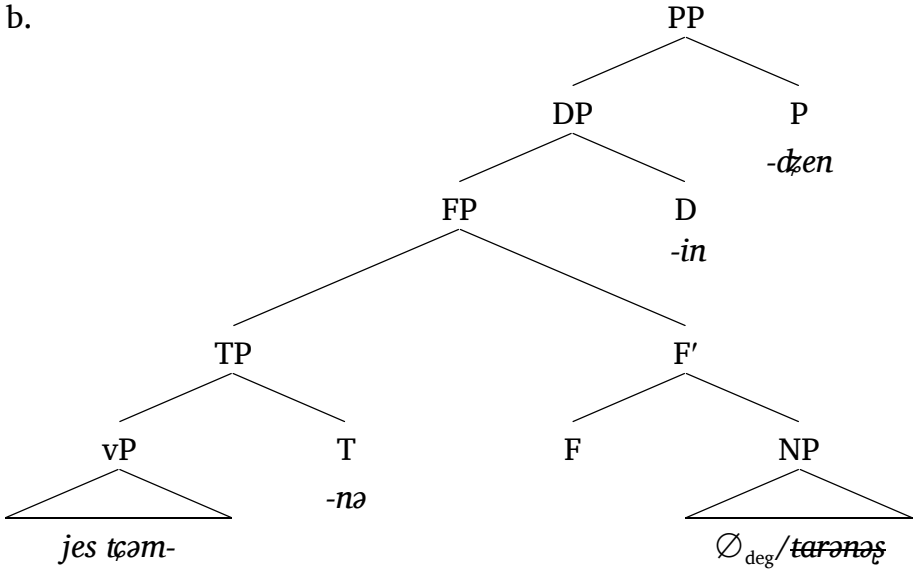
4.5. Covert nouns *vs*. mixed projections

The underlying structures for the standard phrase in (24a) under the mixed extended projection approach and the covert noun approach are given in (24”a) and (24”b), respectively. I assume here that the Ablative suffix on the standard, being a marker of lexical case, spells out a head of category P. The two structures differ in that (24”b) contains an additional functional layer under D, where the participial TP is combined with a phonologically null head noun (or a deleted nominal lexeme).

(24”) a.



(24”) b.



Again, both approaches make similar predictions, treating the standard of comparison as a DP embedded under P (just like canonical DP standards without underlying extended VP structure). At present, I am in no position to make a decisive empirically motivated choice. On the basis of the overt head noun test embraced by [Asarina, Hartmann 2011; Dékány, Georgieva 2021] as the

primary diagnostics for covert nominals, the structure in (24”b) should be preferred: as shown in (24a–b), alternation between overt nouns and lack thereof is even more straightforward in comparatives than in complement clauses (14a–c). However, while (24”b) indeed offers a uniform analysis for (24a–b), the competing account in terms of mixed projections posits a simpler structure for (24a) and is thus not without its merits.

Note that (24”b) has a full NP merged under F’, which may in principle contain other material besides the parametric noun. One line of research to be pursued in the future is whether in sentences of the type ‘…deeper than the awful depth you have dived to’ it is possible to remove the parametric noun while retaining the adjective. Grammaticality of such examples would speak in favor of the covert noun approach, and vice versa.

Syntactic differences between (24”a) and (24”b) may also have semantic repercussions. The latter structure, which contains a parametric noun, straightforwardly accounts for the degree semantics of the standard. The denotation of the DP in (24”a) and the way it enters the semantic computation are less clear and may require positing additional mechanism. It is, however, independently clear that Poshkart Chuvash allows phrasal standards denoting either degrees or individuals (as in (1)). Any compositional account of the semantics of comparison in Poshkart Chuvash must necessarily have means to deal with this, regardless of a particular structural analysis of participial standards.

5. Conclusions

In this paper, I have explored possibilities for a unified structural account of various uses of the Poshkart Chuvash past participle in *-nə*, taking into consideration its functioning in relative, complement, comparative and independent clauses. My primary interest was in situating the Chuvash case of participle-nominalizer polysemy within the parametric typology proposed in [Dékány, Georgieva 2020, 2021] and in seeing whether the covert head noun analysis along the lines of [Sudo 2009, 2015] is viable for Chuvash participial comparatives.

While a unified account under which the suffix *-nə* spells out a head high in the extended VP, most likely T, appears to be working, its specific details turn out harder to pinpoint. While Poshkart Chuvash definitely employs bare, as opposed to nominalized, relative clauses, available evidence as to the syntactic status of its participial complement clauses remains inconclusive. Likewise, while the covert noun analysis neatly captures the data of Poshkart Chuvash

comparatives, at present I have no decisive empirical arguments to rule out the alternative account in terms of mixed projections. Chuvash differs in subtle, but significant ways from other Turkic languages previously studied in this regard (Turkish, Uyghur and, to a lesser extent, Kazakh), which makes it difficult to apply some of the tried diagnostics. This pushes one to search for new criteria and I surmise that in the domain of comparative clauses at least, this search should be primarily directed towards compositional degree semantics, rather than just plain syntax.

Abbreviations

1–3 — 1st–3rd person; ABL — ablative case; ACC — accusative case; CAUS — causative; CMPR — comparative degree marker; CSL — causal case; CV_SIM — simultaneity converb; IMPF — imperfective; INF — infinitive; INS — instrumental case; LOC — locative case; NEG_ASCR — ascriptive negation; NPST — non-past tense; OBJ — object (accusative/dative) case; P_3 — 3rd person possessive/definiteness marker; PC_PST — past participle; PL — plural; PROG — progressive; PST — past tense; REC — reciprocal; SG — singular; ST — stem marker.

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Эгофоричность как интерпретируемое согласование*

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Статья посвящена эгофоричности в мегебском даргинском, нахско-дагестанском языке. Основная идея этой статьи заключается в том, что эгофоричность стоит анализировать как синтаксический феномен, поскольку в мегебском она чувствительна к синтаксической локальности. Предлагается считать, что синтаксическая часть эгофоричности включает в себя два зонда: по признакам лица и по референциальным индексам, причём первый релевантен для реализации эгофорической морфологии, а второй — для эгофорической интерпретации.

Ключевые слова: эгофоричность, согласование, *de se*.

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EGOPHORICITY AS INTERPRETABLE AGREEMENT*

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This paper deals with egophoricity in Mehweb Dargwa, an East Caucasian language. The main proposal of this paper is that egophoricity should be analyzed as a syntactic phenomenon, due to its sensitivity to syntactic locality in Mehweb. The syntactic part of egophoricity is argued to involve two probes: a person probe and an index probe, the first being relevant for realization of egophoric morphology and the second for egophoric interpretation.

Keywords: egophoricity, agreement, *de se*.

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1. Introduction

Egophoricity (also known as conjunct/disjunct marking, [Hale 1980]) is a phenomenon of a certain marker having a peculiar syntactic-pragmatic distribution, the basic generalization of which is as follows.

(1) Egophoric marking arises when
   a. the subject is first person and the clause is declarative.
   b. the subject is second person and the clause is declarative.
   c. the clause is an attitude report and the subject is coreferent to the attitude holder.

Although this phenomenon has attracted quite an attention from typological literature lately ([Floyd et al. 2018; Bergqvist, Kittilä 2020]), there exists only one formal analysis of egophoricity, given in [Coppock, Wechsler 2018]. The core property of their analysis is that it is purely morphosemantic. The slightly changed semantics for the egophoric marking, as in [Coppock, Wechsler 2018], are given in (2).

(2) $[\![\text{EGO}]\!] = \lambda P_{et}.\ \lambda x\colon x = \text{SELF}.\ P(x)$

The main idea of [Coppock, Wechsler 2018] is that egophoricity introduces a presupposition of self-ascription (hence, the contextual SELF primitive): the external argument of the main predicate of the clause is thought to coincide with the individual epistemically responsible for the expressed proposition being true. The notion of subject from the basic generalization given in (1) is translated into their analysis as the x argument of the EGO function. Possibly, it can be interpreted as the following structure existing on LF: [Subj [EGO [TP]]], where syntactic subject corresponds to the x argument and TP corresponds to the P argument.

In this paper I argue against a purely morphosemantic approach, which directly links the egophoric morphology to its interpretation. The relevant data comes from egophoricity in Mehweb Dargwa, an East Caucasian language spoken by ca. 400 people in Dagestan [Dobrushina 2019]. Based on data from Mehweb I argue that egophoricity in Mehweb is sensitive to syntactic locality, which motivates an analysis that makes use of the AGREE operation in contemporary minimalist syntax [Chomsky 2000 *et seq.*].

Namely, I suggest that egophoricity should be analysed as interpretable agreement. The core approach pursued in this paper is that egophoricity involves two distinct probes: an index probe (for example, [Arregi, Hanink 2021]) and a person probe. The person probe is responsible for the egophoric morphology, while the index probe is responsible for interpreting the utterance as self-ascriptive.

Moreover, in attitude reports, egophoricity behaves the same as agreement shift [Sundaresan 2011; Messick 2016 *inter alia*], the phenomenon of a certain feature mismatch between the subject and the verb in *de se* attitude reports. This allows to reduce egophoric marking in attitude reports to another phenomenon, namely, agreement shift, uniting different strategies of self-ascription available in human languages. Thus, under the approach pursued here, egophoricity is understood as interpretable shifted agreement.

The paper is organized as follows. In section 2, I will review egophoricity in Kathmandu Newari and the semantic analysis of [Coppock, Wechsler 2018], while changing it slightly for the purposes of continuity between the sections. In section 3, I will introduce data from Mehweb Dargwa and point out a peculiar interaction between egophoricity and the East Caucasian biabsolutive construction in Mehweb. In section 4, I will elaborate on the idea of a syntactic analysis for egophoricity in Mehweb and draw parallels between egophoricity and agreement shift, suggesting a possible diachronic explanation for egophoricity appearing in Mehweb. Section 5 concludes.

2. Egophoricity in Newari and the semantic analysis: A review

2.1. Newari data

The egophoric distribution is exemplified in the following sentences from Kathmandu Newari (the data comes from [Coppock, Wechsler 2018]).

(3) a. *jĩ* *a:pwa* *twan-ā.*
I.ERG much drink-PST.EGO
'I drank a lot.' {a = b} [Coppock, Wechsler 2018: 40]

b. **jĩ* *a:pwa* *twan-a.*
I.ERG much drink-PFV

(4) a. **jĩ* *a:pwa* *twan-ā* *lā?*
I.ERG much drink-PST.EGO Q
'Did I drink a lot?' {a = b} [Coppock, Wechsler 2018: 40]

b. *jĩ* *a:pwa* *twan-a* *lā?*
I.ERG much drink-PFV Q

(5) a. *chã:* *a:pwa* *twan-a.*
you.ERG much drink-PFV
'You drank a lot.' {a = b} [Coppock, Wechsler 2018: 40]

b. **chã:* *a:pwa* *twan-ā.*
you.ERG much drink-PST.EGO

(6) a. *chã:* *a:pwa* *twan-ā* *lā?*
you.ERG much drink-PST.EGO Q
'Did you drink a lot?' {a = b} [Coppock, Wechsler 2018: 40]

b. **chã:* *a:pwa* *twan-a* *lā?*
you.ERG much drink-PFV Q

(7) a. *wã:* *a:pwa* *twan-a.*
3SG much drink-PFV
'He drank a lot.' {a = b} [Coppock, Wechsler 2018: 40]

b. **wã:* *a:pwa* *twan-ā.*
3SG much drink-PST.EGO

(8) a. *wã:* *a:pwa* *twan-a* *lā?*
3SG much drink-PFV Q
'Did he drink a lot?' {a = b} [Coppock, Wechsler 2018: 40]

b. **wã:* *a:pwa* *twan-ā* *lā?*
3SG much drink-PST.EGO Q

The pairs of examples above show that egophoric marking is obligatory in declarative clauses with a first person subject (3), while being ungrammatical in interrogatives with a first person subject (4). On the other hand, interrogative clauses with a second person subject (5) require egophoric marking, while declaratives with a second person subject are ungrammatical with egophoric marking (6). A third person subject is unable to trigger egophoric marking in an independent sentence regardless of the illocutionary force (7)–(8).

The situation changes, however, once we take attitude reports into account. As shown in examples (9)–(10), egophoric marking indicates the third person subject being coreferent to the attitude holder (9). When egophoric marking is absent, the subject is interpreted to be distinct from the attitude holder (10).

(9) *syām-ã wã a:pwa twan-ā dhakā: dhāl-a.*
Syam-ERG 3SG much drink-PST.EGO COMP say-PFV
'Syam$_i$ said that he$_i$ drank a lot.' [Coppock, Wechsler 2018: 40]

(10) *syām-ã wã a:pwa twan-a dhakā dhāl-a.*
Syam-ERG 3SG much drink-PFV COMP say-PFV
'Syam$_i$ said that he$_j$ drank a lot.' [Coppock, Wechsler 2018: 40]

2.2. Egophoricity and self-ascription

Importantly, coreference is not enough for egophoric marking to arise. As noted by [Coppock, Wechsler 2018], the sentence (9) is false in the following context.

(11) *Syam is looking at a photo from a wild party in which someone is wearing a lampshade on his head. Syam points at the intoxicated partier and says to you, "That guy drank too much"; unbeknownst to Syam, it is himself in the picture.*

This is a context where the ascription of property to oneself is not conscious, and that makes egophoric marking unavailable (and the sentence with egophoric marking false). Since it is not conscious, ascription of property in (11) cannot be self-ascription, since Syam did not refer to himself, but to an individual who happened to be Syam, while not being Syam in Syam's mind. This motivates a view of egophoricity being sensitive to self-ascription. As [Lewis 1979] says, "Self-ascription of properties might suitably be called belief or knowledge *de se*". Thus, we get a slight revision of the basic generalization given in the introduction.

(12) Egophoric marking arises when:
   a. the subject is first person and the clause is declarative.
   b. the subject is second person and the clause is declarative.
   c. the clause is an attitude report, the subject is coreferent to the attitude holder and the attitude is read *de se*.

Such disjunctive generalizations are, however, unsatisfying. What do these contexts have in common? [Coppock, Wechsler 2018] argue that all these contexts are self-ascriptive. It is clear that *de se* attitude reports are self-ascriptive, that is their definition. How does self-ascription derive the interrogative flip, though?

Since *de se* attitude reports are analyzed as centered worlds (individual-world pairs, [Lewis 1979]), [Coppock, Wechsler 2018] suggest that unembedded propositions are to be understood as centered with respect to the epistemic authority of the proposition. When the sentence is a regular declarative, the speaker is responsible for the uttered proposition being true (due to the Gricean maxim of quality).

When the sentence is a polar interrogative, the one responsible for the proposition is the addressee, because under the mainstream semantics for questions a question denotes a set of alternatives. In case of polar interrogatives, this set is simply {p, ¬p}. Since addressee is responsible for her answer being true (due to the Gricean maxim of quality), she is committed to either p, or ¬p.

Thus, if we accept the epistemic authority as the center of propositions marked with egophoricity, the interrogative flip follows. We can then introduce a contextual parameter SELF that coincides with the speaker in declaratives, addressee in interrogatives and the attitude holder in attitude reports. The generalization in (12) is thus derived from independent properties associated with self-ascription.

2.3. Concluding the review

This section has introduced the basics of the grammatical phenomenon of egophoricity and has shown how exactly does the account in [Coppock, Wechsler 2018] reduce egophoric distribution to self-ascription.

Although the semantics in their account appear convincing, their analysis and the framework of their work (an extension of logic of indexicals from [Kaplan 1979]) allows for no syntactic conditions on egophoricity. Importantly, it leaves no room for a possibility of a syntactic process blocking the egophoric marking. In the next section, I will show that this type of interaction between syntax and egophoric marking is exactly what is observed in the egophoric system of Mehweb Dargwa, motivating the need for an alternative analysis based on AGREE.

3. Mehweb Dargwa data

3.1. Mehweb egophoricity

In a collection of articles about certain aspects of Mehweb grammar, [Daniel 2019] and [Ganenkov 2019] refer to a certain Mehweb affix as an egophoric marker.

The marker */-ra/* or */-na/*[1] (glossed as EGO) has the distribution one expects an egophoric marker to have. It is observed in declarative sentences with first person subjects (13)–(14) and in interrogatives with second person subjects (15)–(16), while a third person subject cannot trigger this marker in any independent clause (17)–(18).

[1] [Daniel 2019] lists all allomorphs of the egophoric marker. These two are the most prominent ones.

In (13), the subject is a first person pronoun *nu* 'I' and the clause in declarative, making the egophoric marking obligatory. In (14), on the other hand, the clause is interrogative, which, coupled with a first person subject *nu* 'I', makes egophoric marking impossible.

A similar situation is seen in (15)–(16). In (15), the subject is a second person pronoun *ħu* 'you' and the clause is interrogative, making the egophoric marking obligatory. In (16), on the other hand, the clause is declarative, which, coupled with a second person subject *ħu* 'you', makes egophoric marking impossible.

(13) a. *nu usaʔ-un-na.*
I M.fall.asleep:PF-AOR-EGO
'I fell asleep.' {a = b} [Daniel et al. 2019: 201]

b. **nu usaʔ-un.*
I M.fall.asleep:PF-AOR

(14) a. *dag nu-ni sija b-aq'-ib-aʔ*
yesterday I-ERG what N-do:PF-AOR-Q
'What did I do yesterday?' {a = b} [Daniel et al. 2019: 202]

b. **dag nu-ni sija b-aq'-i-raʔ*
yesterday I-ERG what N-do:PF-AOR-EGO.Q

(15) a. *ħu dag kuda w-aʕqʼ-un-naʔ*
you yesterday where M-go:PF-AOR-EGO.Q
'Where were you yesterday?' {a = b} [Daniel et al. 2019: 202]

b. **ħu dag kuda w-aʕqʼ-un-aʔ*
you yesterday where M-go:PF-AOR-Q

(16) a. *ħu-ni poʕroʕm b-uʕrʔ-aq-ib.*
you-ERG glass N-break:PF-CAUS-AOR
'You broke a window.' {a = b} [Daniel et al. 2019: 202]

b. **ħu-ni poʕroʕm b-uʕrʔ-aq-i-ra.*
you-ERG glass N-break:PF-CAUS-AOR-EGO

(17) a. *rasuj-ni di-ze ca χabar b-urh-ib.*
Rasul-ERG I-INTER(LAT) one story N-tell:PF-AOR
'Rasul told me a story.' {a = b} [Daniel et al. 2019: 204]

b. **rasuj-ni di-ze ca χabar b-urh-i-ra.*
Rasul-ERG I-INTER(LAT) one story N-tell:PF-AOR-EGO

(18) a. *sija b-iq'-uwe le-w-a rasul?*
what n-do:IPF-CVB.IPFV AUX-M-Q Rasul
'What is Rasul doing?' {a = b} [Daniel et al. 2019: 227]

b. **sija b-iq'-uwe le-w-ra rasul?*
what N-do:IPF-CVB.IPFV AUX-M-EGO Rasul

In attitude reports this marker behaves exactly as expected, it marks coreference with the attitude holder. In (19), a long-distance reflexive *sunejni* is interpreted as bound by Rasul, which is marked by the egophoric morphology.

(19) *rasul uruχ w-aʕq-ib sune-jni mašin*
Rasul be.afraid M-LV:PF-AOR self-ERG car

(*b-uʕrʡ-aq-i-ra / *b-uʕrʡ-aq-ib*) *ile.*
N:break-CAUS-AOR-EGO N:break-CAUS-AOR COMP
'Rasul$_i$ was afraid that he$_i$ broke the car.' [Daniel et al. 2019: 214]

Examples in (20) constitute a minimal pair with respect to coreference to the attitude holder. Since Mehweb has indexical shift [Ganenkov 2019], first/second person pronouns can refer to the attitude holder.[2] In (20), an interpretation of a first person pronoun as referring to the attitude holder (Rasul) requires egophoric marking (20a), while an interpretation of a first person pronoun as referring to someone else makes egophoric marking ungrammatical (20b).

(20) a. *rasul uruχ w-aʕq-ib nu-ni mašin*
Rasul be.afraid M-LV:PF-AOR I-ERG car

(*b-uʕrʡ-aq-i-ra / *b-uʕrʡ-aq-ib*) *ile.*
N:break-CAUS-AOR-EGO N:break-CAUS-AOR COMP
'Rasul$_i$ was afraid that he$_i$ broke the car.' [Daniel et al. 2019: 214]

b. *rasul uruχ w-aʕq-ib nu-ni mašin*
Rasul be.afraid M-LV:PF-AOR I-ERG car

(*b-uʕrʡ-aq-ib / *b-uʕrʡ-aq-i-ra*) *ile.*
N:break-CAUS-AOR / N:break-CAUS-AOR-EGO COMP
'Rasul$_i$ was afraid that I$_j$ broke the car.' [Daniel et al. 2019: 214]

[2] In imaginary English with indexical shift, the sentence *John thinks that I am smart* has two interpretations. Either John thinks that he himself is smart, or John thinks that the speaker is smart.

So far, nothing is out of ordinary, we have just confirmed that Mehweb egophoricity is indeed egophoric. Interesting part is the interaction of Mehweb egophoricity with the distinctly East Caucasian biabsolutive construction, which is the topic of the next subsection.

3.2. Biabsolutive construction and egophoricity

3.2.1. The structure of the biabsolutive construction

3.2.1.1. Mehweb biabsolutive construction

Biabsolutive construction in East Caucasian languages is a peculiar class of sentences where both the external and internal arguments of the predicate bear an absolutive case, which is an unexpected configuration in ergative languages like the East Caucasian ones. They usually involve some progressive aspectual semantics.

For example, in (21) both the external argument *nu* 'I' and the internal argument *kung* 'book' both bear an absolutive case. This example is contrasted with example in (22), which only differs from (21) with respect to the case marking on the external argument (subsequently, the absolutive object controls gender-number agreement).

(21) *nu* *kung* *luč'-uwe* *le-w-*(ra).*
I book read:IPF-CVB.IPFV AUX-M-EGO
'I'm reading the book.' [Daniel et al. 2019: 228]

(22) *nu-ni* *kung* *luč'-uwe* *le-b-(*ra).*
I-ERG book read:IPF-CVB.IPFV AUX-N-EGO
'I'm reading the book.' [Daniel et al. 2019: 228]

Since the subject of both sentences is a first person pronoun, we could expect egophoric marking both in (21) and in (22), similarly to (13). However, egophoric marking is infelicitous in (22), while being obligatory in (21). The only difference between (13) and (21)–(22) is the presence of a periphrastic verbal form, which involves an imperfective converb, suggesting that there may be additional verbal structure, which makes the case contrast in (21)–(22) possible.

Notably, the biaboslutive construction does not behave the same in different East Caucasian languages. For example, [Gagliardi et al. 2014] argue that the biabsolutive construction in Lak should be analyzed as monoclausal, while the

biabsolutive construction in Tsez should be analyzed as involving control [Gagliardi et al. 2014].

For Mehweb, [Ganenkov 2019] suggests that the biabsolutive construction involves control. Evidence comes from agentivity restrictions on the subject and the morphological make-up of reciprocals in the biabsolutive construction.

3.2.1.2. Agentivity restriction

The biabsolutive construction becomes ungrammatical or noticeably degraded if the subject is not agentive, as shown in (23). The subjects *ʁʷaˤr* ‘wind’ and *c’a* ‘fire’ are not agentive in any sense of the word, which is what makes these sentences ungrammatical. The ergative counterparts of these examples in (24) are completely acceptable, showing that the source of unacceptability in (23) is indeed the agentivity restriction of the biabsolutive construction.

(23) a. ??*ʁʷaˤr ʁut’-be šiš d-uk’-aq-uwe le-b.*
wind tree-PL move NPL-LV:IPF-CAUS-CVB.IPFV AUX-N
Int.: ‘The wind is shaking the trees.’ [Daniel et al. 2019: 228]

b. **c’a qul-le ig-uwe le-b.*
fire house-PL burn:IPF-CVB.IPFV AUX-N
Int.: ‘The fire is burning houses.’ [Daniel et al. 2019: 228]

(24) a. *ʁʷaˤl-li-ni ʁut’-be šiš d-uk’-aq-uwe le-r.*
wind-OBL-ERG tree-PL move NPL-LV:IPF-CAUS-CVB.IPFV AUX-NPL
‘The wind is shaking the trees.’ [Daniel et al. 2019: 193]

b. *c’a-li-ni qul-le ig-uwe le-b.*
fire-OBL-ERG house-PL burn:IPF-CVB.IPFV AUX-N
‘The fire is burning houses.’ [Daniel et al. 2019: 193]

This restriction constitutes a similarity between Mehweb biabsolutive construction and obligatory control, which is argued to involve an agentivity restriction [Zu 2016], making it possible to suggest that Mehweb biabsolutive construction involves control.

3.2.1.3. Reciprocals

Mehweb reciprocals consist of two numerals *ca* ‘one’, with one bearing the case of the NP binding the reciprocal and the other one bearing the case, which any DP would have in the reciprocal’s position.

In example (25) it is shown that the verb marks its non-subject argument with the superlative case, while the subject is in absolutive. Thus, in (26), the

reciprocal consists of two numerals *ca* ‘one’, one in absolutive case (*ca*) and one in superlative (*caliče*).

(25) *čija* *ħule* *d-iz-ur-a* *sune-la=l* *urši-li-če?*
who.ABS look F1-LV:PF-AOR-Q SELF-GEN=EMPH son-OBL-SUPER(LAT)
‘Who looked at her son?’ [Daniel et al. 2019: 192]

(26) *uz-be* *ca-li-če* *ca* *ħule* *b-iz-ur.*
brother-PL.ABS one-OBL-SUPER(LAT) one.ABS look HPL-LV:PF-AOR
‘Brothers looked at each other.’ [Daniel et al. 2019: 219]

Similarly, in example (27) the external argument *ʔaliini* ‘Ali’ is marked with ergative case and the internal argument *sinka* ‘bear’ is marked with absolutive case, while in (28) the two parts of the reciprocal are the ergative (*calini*) and the absolutive (*ca*) forms of the numeral ‘one’.

(27) *ʔali-ini* *sinka* *b-aˁbʔ-ib.*
Ali-ERG bear.ABS N-kill:PF-AOR
‘Ali killed a bear.’ [Daniel et al. 2019: 191]

(28) *uz-be-ni* *ca-li-ni* *ca* *b-aˁbʔ-ib.*
brother-PL-ERG one-OBL-ERG one.ABS HPL-kill:PF-AOR
‘The brothers killed each other.’ [Daniel et al. 2019: 191]

What’s crucial, it is that in the biabsolutive construction the reciprocal consists of an absolutive numeral and an ergative one, despite there being no overt ergative nominal in the structure. Consider examples (29) and (30). In (29), it is shown that the verb ‘help’ in Mehweb is a ditransitive version of *aq’* ‘do’, which takes the absolutive form of the noun *kumak* ‘help’, an ergative argument, the one who helps, *nuni* ‘I’ in (29), and a dative argument, the one who is being helped, *uršilis* ‘son’ in (29).

Importantly, once we look at this verb in a biabsolutive construction (30) and make the dative argument a reciprocal, one part of the reciprocal is in the dative case (*calis*), while the other is in the ergative case (*calini*), despite the subject *ule* ‘children’ bearing absolutive case, which hints at presence of a silent ergative element in the structure of (30).

(29) *nu-ni* *di-la=l* *urši-li-s* *kumak* *b-aq’-i-ra.*
I-ERG I.OBL-GEN=EMPH son-OBL-DAT help.ABS N-do:PF-AOR-EGO
‘I helped my son.’ [Daniel et al. 2019: 195]

(30) *ul-**e*** *ca-li-**ni*** *ca-li-s* *kumak* *b-iq'-uwe* *le-b.*
child-PL.**ABS** one-OBL-**ERG** one-OBL-DAT help.ABS N-do:IPF-CVB.IPFV AUX-HPL
'The kids help one another.' [Daniel et al. 2019: 220]

The conclusion is that there is a silent ergative nominal bearing element in the structure, namely PRO, since the agentivity restriction already gives a reason to pursue a control analysis of Mehweb biabsolutive construction.

3.2.1.4. The structure

Based on the arguments presented above, [Ganenkov 2019] sketches the following structure for Mehweb biabsolutive construction.

(31) $[_{AuxP}\ DP_{ABS}\ [_{VP}\ PRO_{ERG}\ [DP_{ABS}\ V]]\ AUX]$

My problem with the sketch presented above is that the c-command relation between the auxiliary and the absolutive subject does not predict that the absolutive subject will control the gender-number agreement, since the absolutive object will be the first φ-feature bearing DP the auxiliary probe finds.[3]

Importantly, the structure in (31) cannot be vindicated by the auxiliary being unable find any accessible DP and then extending the probing domain in a Cyclic Agree fashion [Béjar, Rezac 2009], since in ergative counterparts to biabsolutive clauses the auxiliary is able to agree with the absolutive object as shown in (32a), where the auxiliary *leb* bears an agreement marker *-b*, which indicates that the closest absolutive argument is animate and plural. Similarly, in (32b), the auxiliary *ler* bears an agreement marker *-r*, which indicates that the closest absolutive argument is inanimate and plural.

(32) a. *nu-ni* *ul-e* *b-ulc-uwe* *le-b.*
I-ERG child-PL.ABS HPL-catch:IPF-CVB.IPFV AUX-HPL
'I am catching the kids.' [Daniel et al. 2019: 209]

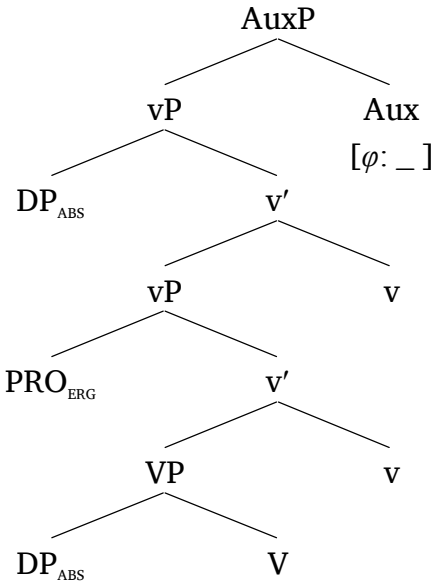
[3] The ergative PRO is unable to participate in gender-number agreement in Mehweb, as evident from the data of verbal periphrasis in Mehweb, as in (i). The fact that the auxiliary probe (positioned higher than the vP with both arguments in it) skips the ergative DP shows that the gender-number agreement in Mehweb is tuned to interact with absolutive DPs only (probe-relativized case discrimination, [Deal 2017]).

(i) *urši-li-ni* *кавar-t* *luk'-uwe* *le-r.*
boy-OBL-ERG letter-PL.ABS write:IPF-CVB.IPFV AUX-NPL
'The boy writes letters.' [Daniel et al. 2019: 199]

b. *urši-li-ni* *kaʁar-t* *luk'-uwe* *le-r.*
boy-OBL-ERG letter-PL.ABS write:IPF-CVB.IPFV AUX-NPL
'The boy writes letters.' [Daniel et al. 2019: 199]

To account for the gender agreement data, I propose the sketch of the structure presented in (33). By positing an additional little v head into the structure, I derive the c-command relation needed for agreement to arise between the auxiliary and the subject absolutive DP.[4] This additional vP layer is what gives rise to the difference between progressive and non-progressive clauses in Mehweb. The peculiar properties of progressives (availability of biabsolutive marking and unexpected behavior of ergative subjects with respect to egophoricity) are possible because of the additional vP layer (and the auxiliary, as will be shown later).

(33)



Given the structure in (33), the auxiliary bears a φ-probe that agrees with the absolutive subject of biabsolutive sentences, which is exactly what the gender agreement data shows. The structure in (33) also allows to suggest that the ergative counterpart sentences, like (22), differ from biabsolutives only with respect to the position of their subject. I propose that the ergative subjects in progressive clauses are positioned in the specifier of the lower vP, exactly where the PRO is present in biabsolutives.

[4] It may be the case that there is AspP right above the higher little vP in (31), following the proposal by [Coon, Preminger 2012] that various aspectual splits found in many languages are due to aspectual heads splitting the clause into two domains. Additional evidence for that could come from the imperfective morphology on the lexical verb. I remain agnostic on the issue, since nothing really hinges on it in this paper.

In the next subsubsection, I will suggest that the structural differences between absolutive and ergative subjects of progressive clauses explain the differences in egophoric marking, namely, the apparent lack of it when the subject is ergative.

3.2.2. Egophoric marking in the biabsolutive construction and its counterpart

As mentioned earlier, the egophoric marking curiously disappears when an ergative (35) counterpart to a biabsolutive sentence (34) is examined. The only noticeable difference between these sentences is the case marking on the subject, *nu* 'I' (absolutive case) in (34) and *nuni* 'I' (ergative case) in (35).

(34) *nu* *kung* *luč'-uwe* *le-w-*(ra).*
I book read:IPF-CVB.IPFV AUX-M-EGO
'I am reading a book.' [Daniel et al. 2019: 228]

(35) *nu-ni* *kung* *luč'-uwe* *le-b-(*ra).*
I-ERG book read:IPF-CVB.IPFV AUX-N-EGO
'I am reading a book.' [Daniel et al. 2019: 208]

To repeat an important point, there is nothing that makes (35) different from (34) aside from the case marking of the subject and the presence of the egophoric marker. [Ganenkov 2019] reports that no noticeable semantic difference has been observed between biabsolutive progressive clauses and their counterparts with regular ergative marking. Thus, the only difference we may use in an analysis is syntactic if we are to tie together the absence of egophoric marking in (35) with the case marking differences between (34) and (35). Additionally, the explanation of the contrast in (34)–(35) should make use of the difference between structures of progressive and non-progressive sentences discussed earlier, since the contrast in (34)–(35) is found in progressives only.

Given the structure in (33) we can suggest that the ergative subject *nuni* 'I' is positioned in the place of the ergative PRO of the biabsolutive construction. Importantly, this allows us to argue that the ergative subject in that position becomes unavailable for any syntactic operation, making the difference between (34) and (35) a matter of the subject's position in the structure.

Namely, I suggest that the ergative subject is inaccessible due to AuxP intervening as a bearer of φ-features, while the absolutive subject moves out of AuxP, making it impossible for AuxP to intervene. As shown above in (32), the auxiliary agrees with the absolutive object, should the progressive clause have a subject in ergative case. Thus, one could hypothesize that any syntactic process

tuned to interact with a φ-feature bearer would first find the AuxP and copy its features onto itself, blocking any interaction with the ergative subject.

We are now able to explain the difference between (34) and (35). The relevant parts of structure for (34)–(35) are given in (36). In both (36a) and (36b) the probe on Aux agrees with the absolutive object and copies its features onto itself.

(36) a. [EGO[$\underline{\varphi:1\text{SG}}$] … $_{\text{XP}}$[*nu*[$\underline{\varphi:1\text{SG}}$] … $_{\text{AuxP}}$[Aux[φ:3SG] $_{\text{vP}}$[[v $_{\text{VP}}$[*kung*[φ:3SG] V]]]]]]

b. [EGO[$\underline{\varphi:3\text{SG}}$] … $_{\text{AuxP}[\underline{\varphi:3\text{SG}}]}$[Aux[$\underline{\varphi:3\text{SG}}$] $_{\text{vP}}$[*nuni*[φ:1SG] [v $_{\text{VP}}$[*kung*[$\underline{\varphi:3\text{SG}}$] V]]]]]

In (36a), the egophoric probe finds the absolutive subject and copies its φ-features, which results egophoric marking being present. In (36b), on the other hand, the egophoric probe is unable to find the ergative subject itself, which is 'hidden' in the lower clause. Instead, the egophoric probe finds AuxP, the structurally closest XP that bears φ-features. Since the features on Aux are the features copied from the absolutive object, (35) lacks egophoric marking because the absolutive object is not a first person nominal.

There are, undoubtedly, questions for this proposal, which I am unable to answer, considering the lack of clause structure analysis in [Daniel et al. 2019]. For example, in order for the argument presented above to work, ergative subjects in non-progressive clauses should move out of their initial position in specifiers of vPs (as in (36a) and (37a)), since otherwise the egophoric probe would always find the vP first and copy the absolutive argument's features onto itself (37b).

(37) a. [EGO[$\underline{\varphi:\alpha}$] … $_{\text{XP}}$[DP_{ERG}[$\underline{\varphi:\alpha}$] … $_{\text{vP}[\varphi:\beta]}$[~~$\text{DP}_{\text{ERG}}$[$\varphi:\alpha$]~~] [v[$\varphi$:β] [V DP_{ABS}[φ:β]]]]]]

b. [EGO[$\underline{\varphi:\beta}$] … $_{\text{vP}[\underline{\varphi:\beta}]}$[$\text{DP}_{\text{ERG}}$[$\varphi$:α] [v[$\underline{\varphi:\beta}$] [V DP_{ABS}[$\underline{\varphi:\beta}$]]]]]

Nevertheless, since the structural position of the ergative subject is argued to be what distinguishes (35) from (34), egophoric marking should be sensitive to the purely syntactic difference between these sentences. Thus, we have an argument for egophoricity being sensitive to a non-local syntactic dependency, which motivates an AGREE-based analysis of egophoric marking in Mehweb Dargwa.

In the next section, I will try to give a more fleshed out analysis and provide a parallel between egophoricity and *agreement shift*, another phenomenon associated with self-ascription in attitude reports.

4. Analysis

4.1. Egophoricity as interpretable agreement

4.1.1. Quick summary of the proposal

As stated in the previous subsection, egophoricity in Mehweb Dargwa should be modelled via AGREE operation of contemporary minimalist syntax to predict its sensitivity to syntactic locality.

Even if that is the case, a problem arises. Egophoric marking influences interpretation, and that cannot be accounted for without providing a way to interpret the features presented on the egophoric probe (wherever it is located).

The hypothesis I pursue in this section is given in (38)–(39). Firstly, I suggest that egophoric element in the syntactic structure bears two distinct probes: a person probe that copies subject's person features and an index probe that copies subject's referential index (similarly to the system in [Arregi, Hanink 2021]).

Secondly, I argue that the egophoric marker is a spell-out of a [PART(ICIPANT)] feature ([Harley, Ritter 2002]) on the person probe, to capture the fact that the egophoric verbal form is the same regardless of illocutionary force/person feature on the subject [Daniel 2019]. Interpretation, on the other hand, works by presupposing that the copied index on the index probe is mapped by the assignment function onto the individual SELF.

(38) Interpretation of features on the egophoric index probe:
EGO presupposes that for the index *i* on the subject DP g(*i*) = SELF

(39) Realization of egophoric morphology:
EGO[PART] ↔ /ra/

How would this work for Mehweb Dargwa data? Consider the following example where the subject *nu* 'I' is a first person pronoun and the clause is declarative, which results in egophoric marking on the verb form *usa?-un-na* 'fell asleep'.

(40) *nu* *usa?-un-na.*
I M.fall.asleep:PF-AOR-EGO
'I fell asleep.' [Daniel et al. 2019: 201]

The probe (wherever it is) finds the subject DP *nu* 'I' and copies the subject's person feature and index onto itself. Then, since the subject bears the privative [PART] feature, the probe gets spelled out as /-ra/. And the index present on the subject is interpreted as being mapped to SELF, the holder of epistemic authority.

For the analysis to work, I will assume that EGO is an evidential head (ModEvid) higher than T and lower than C (according to the Cinque hierarchy, [Cinque 1999]), which appears in structures to be interpreted as self-ascriptive. This idea makes sense considering the evidential nature of egophoricity as a grammatical phenomenon. Henceforth, I will call this head EGO head (for clarity and simplicity).

The proposal above, however, raises an interesting issue of the motivation for having two distinct probes for index and person. Clearly, there is an alternative of a single probe that copies both person feature and index. In the next subsection I will show that the option with two distinct probes is preferable, based on a peculiar agreement pattern in present progressive clauses of Mehweb Dargwa.

4.1.2. Agreement in present progressive

[Ganenkov 2019] reports a curious contrast regarding ergative present progressive sentences in Mehweb, which have been earlier referred to as ergative counterparts to biabsolutive sentences. Recall that the argument in this paper hinges on the lack of egophoric marking in those sentences, as in (41).

(41) *nu-ni* *kung* *luč'-uwe* *le-b-*(**ra*).
I-ERG book read:IPF-CVB.IPFV AUX-N-EGO
'I am reading the book.' [Daniel et al. 2019: 208]

Importantly, this is not the whole picture. [Ganenkov 2019] reports that egophoric marking becomes obligatory in ergative progressive sentences like (41) when the absolutive object is a second person pronoun *ħu* 'you (sg)' or *ħuša* 'you (pl)', as in (42) and (43), respectively.

(42) *nu-ni* *ħu* *ulc-uwe* *le-w-*(ra)*.
I-ERG you.ABS (M)catch:IPF-CVB.IPFV AUX-M-EGO
'I am catching you (male).' [Daniel et al. 2019: 208]

(43) *nu-ni* *ħuša* *b-ulc-uwe* *le-b-*(ra)*.
I-ERG you.PL.ABS HPL-catch:IPF-CVB.IPFV AUX-HPL-EGO
'I am catching you all.' [Daniel et al. 2019: 209]

I suggest that this phenomenon arises due to there being two separate probes for person features and indices. I argue that the following takes place.

(44) What happens in (42):
   a. The person probe finds the AuxP which bears the φ-features of the object *ħu* ‘you’.
   b. The operation in (a) makes the insides of AuxP available for probing (cf. [Preminger 2011; van Urk, Richards 2015])
   c. The index probe finds the ergative subject *nuni* ‘I’ and gets its referential index.
   d. The EGO head ends up with a second person feature set [PART] and the index of the speaker.
   e. EGO[PART] gets spelled out as the egophoric marker.
   f. The speaker is interpreted as bearing epistemic authority, since the index present on index EGO probe is mapped onto the speaker.

Contrast that with (41), which still involves self-ascription (thus we expect the EGO head to appear).

(45) What happens in (41):
   a. The person probe finds the AuxP which bears the φ-features of the object *ħu* ‘you’.
   b. The operation in (a) makes the insides of AuxP available for probing (cf. [Preminger 2011; van Urk, Richards 2015])
   c. The index probe finds the ergative subject nuni ‘I’ and gets its referential index.
   d. The EGO head ends up with a third person feature set and the index of the speaker.
   e. The third person feature set on EGO **does not** get spelled out as the egophoric marker.
   f. The speaker is interpreted as bearing epistemic authority, since the index present on index EGO probe is mapped onto the speaker.

Thus, I propose that the egophoric presupposition is still introduced in sentences like (41), which lack the egophoric marking, while satisfying the conditions on the subject and the illocutionary type of the sentence, the lack of egophoric marking in those sentences is purely morphological.

4.1.3. Full proposal

Since I have defended the view that the index and person features are copied onto EGO independently, I am now in position to give a full analysis for egophoricity in Mehweb Dargwa.

(46) Egophoricity in Mehweb Dargwa:
  a. Egophoricity is an independent head in the syntactic structure.
  b. It is positioned in the place of the Cinquean ModEvid head.
  c. The EGO head has a person and an index probe. (egophoric syntax)
  d. [IDX: *i*] on EGO presupposes that g(*i*) = SELF. (egophoric interpretation)
  e. EGO[PART] ↔ /ra/. (egophoric morphology)

As has been argued above, the proposal in (46) predicts every property of egophoricity in Mehweb Dargwa discussed earlier.

It is far from obvious, however, how exactly does (46) couple with the egophoric behavior in attitude reports. In the next subsection I will argue that this property of egophoricity should not be covered in (46), since it is a question of a theory of shifted agreement, an independent phenomenon attested in languages without egophoricity.

4.2. Egophoricity and shifted agreement

Recall the behavior of egophoricity in attitude reports. Unlike independent sentences, egophoric marking in attitude reports requires the subject to be coreferent to the attitude holder. Under the proposal in (46) it is unclear why does a third person DP coreferent to an attitude holder, which is not necessarily the speaker of the utterance, trigger the egophoric morphology.

To shed more light at this puzzle, consider the phenomenon of shifted agreement [Messick 2016; Sundaresan 2011]. Shifted agreement is a phenomenon of a grammaticaly third person element triggering first/second person agreement morphology on the verb in an attitude report. For example, in (47) an anaphor *taan* controls[5] the first person agreement marker *-een* on the verb. Likewise, in (48) a third person pronoun *ṭanu* controls the first person agreement marker *-nu* on the verb.

[5] [Sundaresan 2011, 2020] argues that the agreement marker is controlled, in fact, by a silent first person nominal in the structure. For current purposes I have summed up what happens in examples with shifted agreement without appealing to silent elements in the syntactic structure. Moreover, see [Messick 2016, 2020] for syntactic arguments against Sundaresan's view.

(47) Tamil [Sundaresan 2020: 7]

Ramani	***taan***	*Sudha-vœ*	*virŭmb-ir-**een**-nnŭ*	*so-nn-aan.*
Raman	SELF	Sudha-ACC	love-PRS-1SG-COMP	say-PST-3MSG

'Raman$_i$ said that he$_i$ loves Sudha.'

(48) Telugu [Messick 2016: 2]

Raju	***ṭanu***	*parigeṭṭ-œœ-**nu***	*ani*	*cepp-œœ-Du.*
Raju	3SG	run-PST-1SG	COMP	say-PST-M.SG

'Raju$_i$ said that he$_i$ ran.'

I argue that this is exactly what happens in Mehweb egophoricity: we observe a third person nominal triggering a first/second person morphology on the syntactic element, which agrees with this nominal. Additional support for unifying egophoricity in Mehweb with a broader phenomenon of shifted agreement comes from the fact that other Dargwa lects exhibit shifted agreement as reported by [Ganenkov 2021].

(49) Aqusha Dargwa [Ganenkov 2021: 10]

ʔaḏlis	*hanbik-ib*	*sa-j*	*q'an*	*iub-ra*	*ili.*
Ali	thought.3	self-M.SG	late	(M.SG)became-1	COMP

'Ali$_i$ thought that he$_i$ was late.'

Thus, I suggest that the proposal in (46) may be left as is, if we assume a theory of shifted agreement that considers the first person morphology on the verb to be first person morphology, while the interpretation is handled by something else. An example of such theory is given in [Messick 2020].

Moreover, considering the availability of shifted agreement in Dargwa [Sumbatova 2019], it is possible to make a conjecture that Mehweb egophoricity has evolved from the shifted agreement.[6] Since shifted agreement is essentially a way to mark embedded self-ascription it is only natural to expect that Mehweb egophoric marking was derived via extending this strategy to independent sentences. This consideration is additionally supported by the common historical source of Mehweb egophoric markers and person agreement markers in other Dargwa lects (as in Aqusha). See [Lum 2020] for a similar conclusion with respect to egophoricity in Dhivehi, an Indo-Aryan language.

[6] Interestingly, [Coppock, Wechsler 2018] mention that egophoricity in Kathmandu Newari is likely to have evolved from a marking strategy for control constructions (which is another way to mark embedded self-ascription).

The goal of this subsection was not to give an analysis of agreement shift, but to show that an agreement-based theory of egophoric marking (such as one presented here) may ignore the attitude reports data due to it being handled by other mechanisms.

Furthermore, the similarity in semantics of shifted agreement and egophoricity, coupled with availability of shifted agreement in languages related to Mehweb Dargwa, allows to speculate that Mehweb egophoricity has evolved from shifted agreement via extending a strategy of self-ascription marking for subordinate clauses to independent ones.

5. Conclusion

In this paper I have attempted to give an agreement-based analysis of egophoric marking in Mehweb Dargwa, an East Caucasian language. Let me repeat my main proposal. Points (50a–c) concern syntax of egophoricity, the point (50d) concerns semantics-pragmatics of egophoricity (along the lines of [Coppock, Wechsler 2018]), and the point (50e) concerns morphological realization of egophoricity.

(50) a. Egophoricity is an independent head in the syntactic structure.
b. It is positioned in the place of the Cinquean ModEvid head.
c. The EGO head has a person and an index probe.
d. [IDX: i] on EGO presupposes that $g(i) = \text{SELF}$.
e. EGO[PART] ↔ /ra/.

The core idea of my analysis is that egophoricity is dependent on syntactic agreement processes, as argued in section 3.2 based on the lack of egophoric marking in contexts where there are reasons to suppose that the ergative subject is inaccessible for syntactic operations.

These processes are initiated by two probes: a person probe and an index probe. The person probe is responsible for the morphology (50c) and the index probe in responsible for the self-ascription presupposition of egophoricity [Coppock, Wechsler 2018]. The dissociation of these probes has been argued for in section 4.1.2, the main point being that it allows to capture strange patterns of egophoric marking in present progressive straightforwardly.

Under the approach pursued in this paper, the curious behavior of egophoricity in attitude reports is reduced to agreement shift, uniting two strategies of self-ascription observed in human languages, and also supporting the

view expressed in [Lum 2020] that egophoric marking may arise as a result of "functional reanalysis of [the person agreement] marker in semi-direct speech".

To conclude, egophoricity in Mehweb Dargwa is syntactic. Maybe this is true for other languages as well.

Abbreviations

1, 2, 3 — 1st, 2nd, 3rd person; ABS — absolutive case; ACC — accusative; AOR — aorist; AUX — auxiliary verb; CAUS — causative; CL — gender agreement slot; COMP — complementizer; CVB — converb; DAT — dative case; EGO — egophoric marker; EMPH — emphatic clitic; ERG — ergative case; EVID — evidential marker; F — feminine gender; F1 — special Mehweb feminine gender (for girls and unmarried women); FUT — future tense; GEN — genitive case; HPL — animate + plural; IDX — index; INTER(LAT) — interlative case; IPF — imperfective stem; IPFV — imperfective aspect; LOC — locative case; LV — light verb; M — masculine gender; N — neuter gender; NOM — nominative case; NPL — neuter + plural; OBL — oblique case affix; PF — perfective stem; PFV — perfective aspect; PL — plural number; PRS — present tense; PST — past tense; SELF — reflexive pronoun (also the SELF primitive of [Coppock, Wechsler 2018]); SG — singular number; SUPER(LAT) — superlative case; Q — interrogative marker.

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Показатель косвенной засвидетельствованности в удмуртских вопросительных конструкциях*

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В статье исследуется маркер косвенной засвидетельствованности в вопросительных структурах в удмуртском (уральский, пермский) языке с типологической точки зрения. Рассматриваемые эвиденциальные показатели возможны в вопросительных конструкциях в удмуртском языке без формальных ограничений, и они отражают точку зрения говорящего. Их интерпретация соответствует их использованию в декларативных формах: они так же отмечают косвенную засвидетельствованность и адмиративность. Эвиденциальные формы склонны указывать на ментальное (и эмоциональное) состояние говорящего, и при этом вопросительные структуры с такими показателями можно интерпретировать как неканонические вопросы.

Ключевые слова: удмуртский язык, эвиденциальность, вопросительные структуры, косвенная засвидетельствованность, вопросы, адмиративность.

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THE INDIRECT EVIDENTIAL MARKER IN INTERROGATIVES IN UDMURT*

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The paper discusses the indirect evidential marker in interrogatives in Udmurt (Uralic, Permic) from a typological point of view. Indirect evidentials are possible in interrogative structures in Udmurt without formal restrictions and they mark the speaker's perspective. Their interpretation is in accordance with their use in declaratives: they mark indirect evidence and mirativity. Indirect evidentials tend to signal the speaker's mental (and emotional) state in such cases interrogative structures can be interpreted as non-canonical questions.

Keywords: Udmurt language, indirect evidentiality, interrogatives, questions, mirativity.

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1. Introduction

Evidentiality is a category concerning the type of information source one has for a proposition [Aikhenvald 2004]. Although the notion of evidentiality and types of evidence are categorized differently in the available literature, cf. [Willett 1988, Aikhenvald 2004, Plungian 2010], generally, the types of direct and indirect evidence are distinguished. Since in Udmurt only indirect evidentiality is encoded morphologically, the study discusses indirect evidential forms in interrogatives.

The analysis relies on contemporary data of the online Udmurt corpora and on results of consultations with native speakers.[1] Interrogatives are typically associated with the speech act of questioning, cf. [Sadock, Zwicky 1985: 178–180; Higginbotham 1996]. The paper focuses on root interrogatives in questions. The study employs a typological point of view based on the works of Aikhenvald [2004; 2015] and San Roque et al. [2017].

The paper is organized the following way: section 2 gives an overview on the typological remarks on evidential marking in interrogatives and section 3 introduces evidentiality in declaratives in Udmurt. Section 4 discusses evidential marking in interrogatives and section 5 summarizes the results and relates them to the typological literature and to previous observations concerning Udmurt.

2. Typology of evidentials in questions

Typologically, the number of evidential markers possible in interrogative clauses is less than in declaratives [Aikhenvald 2004: 244; 2015: 256]. The typology outlined by San Roque et al. [2017] focuses on morphological marking of evidentiality in questions with interrogative morphosyntax. From the properties covered in their paper the issues of formal distribution and perspective are relevant for evidential marking in questions in Udmurt. Beside these features, the interpretation of such questions is also discussed in this section. Evidentials in interrogative structures in a given language are typically viewed in comparison to declaratives.

[1] Corpus data are from the main and one of the subcorpora of the online Udmurt Corpora. The main corpus has 9.57 million tokens and consists of texts of contemporary press, blogs, the Udmurt translation of the New Testament and some articles of Udmurt Wikipedia. The subcorpus has 2.66 million tokens and comprises open posts and comments of social media. (http://udmurt.web-corpora.net/index.html, last accessed: 24/11/2021).

Formally unrestricted evidential marking in interrogatives means that the same set of evidential markers can be found in interrogative structures as in declaratives. This can be observed for example in Nganasan (Uralic, Samoyedic) which has a four-term evidential system. Evidential marking can be partially restricted, therefore only a subset of evidential markers may appear in questions or only some interrogative structures may include them. Partial restriction can be found in Jarawara (Arawan) which allows evidential marking in polar but not in constituent interrogatives. There are languages where interrogative clauses cannot be marked for evidentiality — that is the case in Enets (Uralic, Samoyedic). Finally, a distinct evidential marking can be employed in interrogatives with markers different from the ones found in declaratives (cf. Tariana, Arawak).

Evidentiality is often viewed as a deictic category as it “marks a relation between the speaker and the action they describe” [de Haan 2005: 379]. Evidentials are generally considered speaker deictic [Brugman and Macaulay 2015: 216], consequently the speaker-anchored perspective is the default in declaratives. There are some languages which maintain this speaker-anchored perspective in questions as well, such as in the Yukaghir languages [Maslova 2003: 228]. However, it is cross-linguistically a more common pattern that the perspective in interrogative structures changes to be addressee-anchored, i.e. the evidential marker in questions signals the addressee’s information source anticipated by the speaker. This is also called interrogative flip [Tenny and Speas 2013] and can be observed, for example, in Turkish [Meriçli 2016: 10]. In addition, in some cases either speaker or addressee perspective seems to be a plausible interpretation, for example in Macedonian [Friedman 2003: 201].

The evidential marking in questions may have semantic and pragmatic connotations different from the ones found in statements [Aikhenvald 2004: 242]. Evidentials can have mirative or epistemic overtone in questions and as a pragmatic consequence, they are not interpreted as information seeking questions, but rather non-canonical ones, such as self-directed, relayed, or conjectural [San Roque et al. 2017]. Furthermore, appropriateness should be mentioned as well, which is also in connection with the perspective represented by evidentials in interrogatives and primarily concerns the issue of how polite it is to make assumptions about the addressee’s knowledge.

3. Evidentiality in declaratives in Udmurt

In Udmurt evidentiality can be expressed through morphological means only in the past tenses. The system comprises an indirect evidential and a default past tense. In the system the marking of indirect evidentiality is fused with the marking of the past tense, therefore in descriptive grammars it is often referred to as 2nd past tense. It primarily shows the speaker's lack of direct evidence about the events in question [Leinonen, Vilkuna 2000; Skribnik, Kehayov 2018]. The marker does not differentiate between evidence types but values of hearsay or inferential evidence are determined contextually. The indirect evidential is also used to express mirativity, lack of control (only in first person context) and, implicitly, a lower degree of certainty[2] [Siegl 2004; Kubitsch 2022]. However, the exact interpretation the paradigm conveys is usually context-bound. Consider example (1) which can have the following interpretations in zero context: a) the speaker has indirect evidence (cf. evidentiality), b) speaker has just realized the current state of affairs and therefore might be surprised (cf. mirativity), c) the speaker is not committed to the truth of the proposition and does not know well the circumstances of the event in question (cf. epistemic modality, commitment). Note that these interpretations represent different notions related to knowledge [Aikhenvald 2021].

(1) *tunne* *gurt-yn* *tyl-ez* ***kysi-l'l'am***
today village-INE electricity-ACC switch.off-EV.PST[3PL]
'Today electricity has been switched off in the village.' (I heard or I infer)
'Today electricity has been switched off in the village.' (I have not expected)
'Today electricity has been switched off in the village.' (I am not entirely sure)

However, the use of the indirect evidential is not obligatory even if the speaker has indirect evidence — the default past tense, often referred to as 1st past, is widely applicable to describing events happened in the past [Siegl 2004; Leinonen, Vilkuna 2000].[3]

[2] The indirect evidential can (but not necessarily) implicate lower degree of certainty due to the pragmatic relationship between evidential source, evidential strength, and epistemic modality [Givón 2001].

[3] There is no unanimity in the literature of the Udmurt language about the status of the 1st past tense — in some works [GSUJ 1962, Tepljashina, Lytkin 1976, Tarakanov 2011] it is viewed as a direct evidential while other works consider it a default past tense [Leinonen, Vilkuna 2000, Siegl 2004]. Based on the research of the author, encoding direct evidentiality is clearly not part of the semantics of the paradigm, but it is important to mention that contextually, especially in contrast to indirect evidential forms, it indeed can be associated with direct evidence, factuality, and higher degree of certainty.

Evidential distinction is possible in the analytic past tenses as well. Such tenses comprise a finite verb form and either the default past tense form or the indirect evidential form of the verb ‘be’ that are *val* and *vylem*, respectively.

4. The indirect evidential in questions in Udmurt

Considering the Permic languages (Udmurt, Komi-Zyrian and Permyak) brief remarks have been made previously by Skribnik and Kehayov [2018: 542] on the occurrence and interpretation of evidentials in questions. These observations are based on the works of Leinonen and Vilkuna [2000: 498] and Siegl [2004: 161]. According to these, evidentials are observed in polar questions[4] but not in constituent questions. The evidential refers to the perspective of the questioner and conveys assumption or surprise. Also, evidentials are considered extremely rare in sentences marked orthographically as questions [Siegl 2004]. The following points discuss the typological properties outlined in the previous section, and review and specify these claims focusing on Udmurt.

4.1. Formal distribution

Considering formal distribution three structures are discussed: constituent, polar and alternative questions [cf. Krifka 2011: 1744]. The current subsection focuses on structural properties and does not discuss interpretation. Notes on interrogative structures and question formation in Udmurt are based on Winkler [2011: 145–147], Miestamo [2011: 18] and Bartens [2000: 345].

The indirect evidential may appear in all question types introduced above. Constituent questions (cf. example (2)) are formed with interrogative pronouns. The position of the pronoun is not restricted in the sentence, but it usually appears in initial position. (2) is an extract from an interview conducted with an expert of traditional handicraft.

(2) *Ogja* ***kyźy*** ***vuri-śko*** ***vyl-em*** *vaškala* *dyr-ja?*
all.together how sew-PRS.3PL be-EV.PST[3SG] old time-ADV
‘Overall, how did they use to sew in the old times?’

[4] Both Leinonen and Vilkuna [2000: 498] and Siegl [2004: 161] cite one example for Komi-Zyrian and Udmurt, respectively. However, the Komi-Zyrian question does not have polar interrogative morphosyntax and it might be considered a rising declarative. In the Udmurt example the indirect evidential form appears in a statement which is followed by a question tag. Therefore, the indirect evidential form does not appear in an interrogative syntactic environment.

Polar interrogatives (cf. examples (3) and (4)) are formed with the clitic *=a* that is attached to the focus of the question. However, the clitic is ungrammatical with some other particles, such as the emphatic *uk* or *veď* [Zubova et al. 2020]. Alternatively, polar questions can be marked only by intonation as well with a rising intonation on the constituent the focus of the question [GSUJ 1970: 26].

(3) is part of an interview with a famous Udmurt writer. The polar question clitic is attached to the verb in its indirect evidential form, but the joint appearance of *=a* and the indirect evidential is also possible in questions where it is attached to some other constituent of the sentence.[5] In (4) the question presupposes that human sacrificial rituals happened among Udmurts in the 18th century and asks about their frequency. The clitic is attached to the adverb *čem* 'often'.

(3) ***Šajan*** ***vyl-em=a*** ***so*** *píči* *dyr-ja-z?*
mischievous be-EV[3SG]=Q s/he small time-INE-POSS.3SG
'Was she mischievous when she was a little child?'

(4) ***Čem=a*** ***pumiśky-lo*** ***vyl-em*** *aźlo* *vakyt-e* *udmurt-jos* *pölyn*
often=Q meet-FUT.3PL be-EV.PST[3SG] earlier period-ILL Udmurt-PL PP

aďami-os-ty *vöśan-jos?*
human-PL-ACC sacrificial.ritual-PL
'Were human sacrificial rituals frequently encountered among Udmurts in earlier times?'

Alternative questions are formed either with the disjunction *jake* 'or' or with the double use of the polar interrogative clitic on the focused constituents. Sometimes a combination of both strategies can be observed, just as in (5), in which the question is evoked by a piece of news about a musician who sells his accordion. Each disjunct is marked with the clitic *=a* and the disjunction *jake* 'or'.

(5) *Artîst-len* ***ukśo-jez=a*** ***byr-em*** ***jake***
artist-GEN money-POSS.3SG=Q run.out-EV.PST[3SG] or

kreźgur ***tirlyk-jos-yz-a*** *ukyr* *tros* ***ľukaśki-ľľam?***
music instrument-PL-POSS.3SG=Q too much collect-EV.PST[3PL]
'Did either the artist run out of money, or did he accumulate too many musical instruments?'

[5] Such questions can be considered focus questions. Focus questions contain a focused constituent and have background assumptions which are not part of the question [Kiefer 1980: 100–101]. In example (4) the background assumption is that there were indeed human sacrificial rituals, and the question focuses on their frequency.

Although the paper focuses on root interrogatives, it has to be mentioned that indirect evidentials appear in embedded interrogatives as well, since evidential marking is possible in subordinate clauses in Udmurt.[6] Example (6) is a comment on a story about how some children were attacked by dogs and saved themselves by climbing to the top of a tree.

(6) ***Kyźy*** *syče* *pićći* *špana-os* *kyz* *jyl-e* *tuby-ny* ***bygati-ľľam,***
how such small child-PL pine peak-ILL climb-INF be.able-EV.PST[3PL]

mon ponna vala-n-tem.
I PP understand-NMLZ-CAR
'How such small children could climb to the top of the pine tree, I cannot understand.'

As the examples show, Udmurt can be reckoned among languages with formally unrestricted evidential marking in interrogatives, even though differences can be observed in the frequency of structures — that is discussed in section 4.4.

4.2. Perspective

In accordance with previous claims, the current investigation confirms that the indirect evidential maintains the speaker's perspective in interrogatives.

In the context of example (7) the author of this segment is having a phone conversation with their mother. The mother suddenly hangs up and calls again thirty minutes later and explains herself (i.e. her husband brought guests). The questioner asks the question in (7). In this case the questioner has only indirect evidence as they are in a different town at the time, and talking on the phone. The addressee of the question, however, being present, has direct evidence.

(7) *Kin-jos-yz* *so* ***pyr-t-em?***
who-PL-ACC s/he enter-CAUS-EV.PST[3SG]
'Who did he welcome?'

[6] Evidential marking in subordinate clauses is typologically rare [Forker 2018]. In Udmurt indirect evidential forms in subordinate clauses are used to indicate indirect evidence and mirativity. They are more frequently observed in complement clauses with verbs expressing cognitive processes or speech in the main clause (*verba dicendi et sentiendi*).

Example (8) also shows speaker-anchored perspective. It is part of short report on a *krezh*[7] playing contest. One of the contestants participated with their mother and brothers. The mother tells the reporter that all their children are quite musical, they play different musical instruments and also sing. After that, the reporter asks the mother the question seen in (8). The questioner does not have direct evidence about the background of the addressee's children, while, naturally, the addressee has.

(8) *Kin vyžy-je* ***myni-ľľam*** *nylpi-os-ty?*
who root-ILL go-EV.PST[3PL] child-PL-POSS.2PL
'Whose tracks your children followed?'

The evidential contribution targets the presupposition of the question [cf. Maslova 2003 on Yukaghir]. In (7) the presupposition is that the father welcomed someone, and the evidential contribution is that the questioner has indirect evidence about this. In (8) the questioner presupposes that the children are musical because they followed the steps of one of their relatives and the indirect evidential shows that questioner's lack of direct evidence. The same can be observed in the examples in section 4.1. For instance, in example (2) the presupposition is that there is a way they used to sew in the old times. The evidential contribution is that the questioner has indirect evidence about the presupposition. In languages with addressee-anchored perspective in interrogatives the evidential contributes to the answer (i.e. the questioner assumes a specific type of evidence the answer will be based on).

Based on the evaluation of native speakers it seems that the addressee-anchored interpretation of the indirect evidential is not possible in questions. Speakers were presented with the following situation: we are playing a game when I hide a marble in one of my hands and they have to guess in which hand it is. In the description it was specified that they did not see me hiding the marble and they do not know in which hand it is currently located. After that, speakers had to judge which of the following questions would be acceptable in this situation:

(9) a. *Jadro-jez kud-az ki-jam* ***vati-śkem?***
marble-DET which-DET.ILL hand-ILL.POSS.1SG hide-EV.PST[1SG]
'Which hand did I hide the marble in?'

[7] Traditional Udmurt musical instrument.

b. *Jadrojez* *kudaz* *kijam* ***vat-i?***
marble-DET which-DET.ILL hand-ILL.POSS.1SG hide-PST[1SG]
'Which hand did I hide the marble in?'

In declaratives first person indirect evidential forms encode the speaker's lack of control or lack of awareness in connection with their own actions which are typically realized post factum due to some sort of evidence [Kubitsch 2019]. If addressee-anchored perspective was possible, and the indirect evidential flipped in interrogatives to say something about the information status of the addressee, it could be used in questions to show the addressee's lack of direct evidence and awareness about the whereabouts of the marble. However, consultations showed that in such cases the first person evidential form conveys the same meaning as in declaratives — it expresses the speaker's lack of control, in this specific case, for example, the speaker has forgotten where they hid the marble. Because of this the use of the indirect evidential is infelicitous in the context outlined above.[8]

According to the typological literature the speaker-anchored perspective in interrogatives is typical for languages with indirect or inferential evidentials [San Roque et al. 2017: 134]. The more direct the evidence the marker is encoding,[9] the more likely it represents addressee perspective in questions. In Udmurt, the different types of indirect evidence are not basic categories, the indirect evidential marking is not differentiated from this point of view.[10]

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[8] However, the judgment of native speakers was not completely homogenous — for some of them the indirect evidential form was acceptable to some extent in the above mentioned situation, but they immediately noted that the default past tense is preferred. Even though it may be acceptable, based on their evaluation, the form still encodes the speaker's lack of control. It is possible that in the context above the indirect evidential could be used as a stylistic strategy when the speaker behaves as if they did not know where the marble is or in remind-me questions. However, this assumption needs further investigation.

[9] The outlined hierarchy: participation > vision > other sensory experience > inference/report [San Roque et al. 2017: 133].

[10] From a historic point of view, Udmurt indirect evidentiality is also in connection with inferentiality. The paradigm of the indirect evidential past tense is based on the perfect participle and in many works the paradigm is historically associated with a perfect past tense [Bartens 2000: 202–203; Izvorski 1997: 236]. In addition, a typological connection is established between inference and perfect meanings [Comrie 1976: 110; Aikhenvald 2015: 268] as both category focuses on the result of an event and perfects can develop into evidentials in many languages [Bybee et al. 1994: 97].

4.3. Interpretation

As some examples have already suggested, the indirect evidential in questions has the same types of interpretation as in statements. It can signal the questioner's indirect evidence (cf. (2), (7), (8)), mirativity[11] and lack of control. The latter is possible only in first person contexts (cf. (9a)). These notions are strongly connected, and they do not exclude each other. Speaking of declaratives, a piece of information can be acquired through indirect means and be unexpected at the same time. The same holds for questions — despite the speaker's lack of direct evidence about the events the indirect evidential also can imply mirativity.[12]

The latter can result in the pragmatic consequence that such questions rather reflect the speaker's mental and emotional state than seeking for information. The speaker's realization of the occurrence of a (possible unexpected) event triggers them posing (rather than asking) a question [cf. Lyons 1977]. Utterances with the indirect evidential are often considered to be more emotive, not only in questions, but in declaratives as well. Also, an emotional value is frequently associated with mirative markers in the typological literature [Aikhenvald 2012]. Utilizing the emotiveness of the indirect evidential to show the speaker's attitude towards the propositional content results in non-canonical questions, such as questions posed to express wonder (cf. (10)) or reflective ones (cf. (11)). Reflective questions do not oblige the addressee to answer but express the speaker's interest in an issue [Krifka 2011: 1743]. In Udmurt these questions are also often accompanied with the speaker's surprise or with other emotional values. This also shows that indirect evidential forms maintain the speaker's viewpoint in questions as they reflect on the speaker's emotional and mental status. In written texts such questions are often marked orthographically differently (e.g. excessive use of punctuation).

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[11] Mirativity is typically associated with new information and speaker's surprise [DeLancey 1997]. Here I adopt the definition of Mexas [2016] about mirativity. According to his analysis, the core meaning of mirativity is realization, namely the transition from the state of lacking awareness to the state of awareness. This realization can result in speaker's surprise, but surprise is not a criterion for the mirative reading. Other kindred notions are unexpectedness and counter-expectation (cf. [Slobin, Aksu 1982]), which can be the cause of mirative marking. According to Mexas [2016: 10] unexpectedness is an overtone of realization, which can be "the logical antecedent of the latter (i.e. realization), although not necessarily a condition for its occurrence".

[12] Note, that the mirative interpretation in declaratives is not always implied. Instances can be found of the evidential past tense form of the verb 'be' *vylem* which encodes mirativity without referring to the information source of the speaker. Such type of use was not observed in questions so far.

Emotive value can be seen in (10). For the jubilee of a regional newspaper local students prepared presents made from former issues of the paper (e.g. a dress, a dog, a doll, flowers and a cake). Members of the editorial board were amazed by the creativity of the students and the number of gifts they had prepared. After describing the gifts in detail, the author of the segment poses the questions below. On the one hand the speaker has indirect evidence as they were not present during the preparation of the gifts. On the other hand, the use of the indirect evidential highlights their astonishment.

(10) ***Ku*** *vań-ze* *ta-je* *soos* ***vui-ľľam*** *leśty-ny?!*
when all-DET.ACC this-ACC they arrive-EV.PST[3PL] make-INF

Kyźy ***bygati-ľľam*** *tače* *usto* *pörmyty-ny?!*
how be.able-EV.PST[3PL] such excellent make-INF
‘When did they have the time to do all of this?! How could they make it so wonderfully?!’

In example (11) the speaker expresses their incomprehension (and disapproval) that a Russian woman is sent to a Finno-Ugric beauty pageant as an Udmurt delegate. The indirect evidential shows the speaker’s evidence type and increases the emotive value of the question complementing the expression of the speaker’s attitude. In order to have a better understanding of the context not only the question formed with the indirect evidential is presented, but the questions preceding and following it.

(11) *Maly* *finn-ugor* *čošatskon-e* *ʒ́uć́* *nyl* *myn-e?*
why Finno-Ugric competition-ILL Russian girl go-PRS.3SG

Ma, *čeber* *UDMURT* *nyl-jos* ***byri-ľľam=a???***
what, beautiful Udmurt girl-PL run.out-EV.PST[3PL]=Q

Jake *so udmurt=a?* *Kin* *ke* *tod-e=a??*
or s/he Udmurt=Q who if know-PRS.3SG=Q
‘Why does a Russian girl participate in the Finno-Ugric competition? What, have we run out of beautiful UDMURT girls??? Or is she Udmurt? Does anyone know??’

The inference about the possible unavailability of an Udmurt woman suitable for a beauty pageant is drawn by the fact that a Russian one is participating. The question does not actually seek for information, but it is a speculation

about the evaluation of evidence. The indirect evidential form indicates that the inference (there are not available Udmurt women for the competition) does not correlate with the speaker's beliefs (there should be available Udmurt women who can be sent to a Finno-Ugric themed competition). The contradiction is underlined by the questions following the highlighted segment — the conclusion does not correspond to the speaker's expectations therefore they try to resolve the contradiction by asking whether the participant might be Udmurt after all.

Furthermore, based on consultations with native speakers,[13] a distinction can be made between questions formed with the indirect evidential and with the non-evidential past tense in terms of expressing the speaker's attitude and seeking for information. Such difference was established by the third of the informants.

(12) a. *Kyźy* *aźlo* *tyl-tek* ***uli-ľľam?***
how long.ago electricity-car live-EV.PST[3PL]
'How did they live without electricity back then?'

b. *Kyźy* *aźlo* *tyl-tek* ***ul-i-zy?***
how long.ago e lectricity-car live-PST-3PL
'How did they live without electricity back then?'

According to this distinction, the question formed with the indirect evidential (12a) highlights the speaker's attitude towards the propositional content. As a result, such questions are formed to express the speaker's surprise or wondering about a given situation but do not necessarily request an answer. During the consultations they were often paraphrased inserting the particle *meda* 'I wonder' (example (13)) which are used in reflective questions [Zubova 2018].

(13) *Kyźy* ***meda*** *aźlo* *tyl-tek* ***uli-ľľam?***
how PTC long.ago electricity-car live-EV.PST[3PL]
'[I wonder] how they lived without electricity.'

[13] Consultations were originally conducted to examine evidentiality in Udmurt and were carried out with 26 native informants. During the task speakers had to provide a possible speech situation in which, in their estimation, the given sentence can be uttered. Informants first were presented with the sentence including evidential past tense forms. After that a modified version of the sentence with the default past tense form were given and speakers had to characterize the differences between the two versions of the sentence.

However, the question formed with the non-evidential past tense (12.b) seeks for information and is not associated with an emotional value. Differences can be observed between the prosody as well: information seeking constituent questions have a falling, while questions displaying the speaker's emotional state have a rising intonation.[14]

Of course, the content of the question seen in example (12) is prone to have the interpretation of speaker's surprise. But the fact that some speakers distinguished indirect evidential and past tense forms according to the above mentioned viewpoints, confirms that the indirect evidential can contribute to the non-canonical interpretation of a question.

It is important that the use of the indirect evidential does not automatically result in a non-canonical question. Indirect evidentials can occur in proper information seeking questions without any overtone of wondering or surprise (cf. examples (2), (3), (7), (8)). Therefore, their application in questions is not a systematic strategy to form non-canonical questions. But such forms are still tools for highlighting the speaker's emotional and mental state towards the propositional content.

4.4. Remarks on frequency

There is no precise data available about the frequency of evidential marking in interrogatives although some observations can be made in this regard. For practical reasons, claims about frequency are based on a sample of texts collected from blogs.[15] The collection contains 300 blog entries, approximately 86000 tokens, 1151 indirect evidential forms. The table below summarizes the distribution of questions containing an indirect evidential verb form.

Table 1. Distribution of questions containing an indirect evidential verb form

Constituent questions		Alternative questions		Polar questions			
n/a		n/a		Morphosyntactically marked		Morphosyntactically unmarked	
Root	Embedded	Root	Embedded	Root	Embedded	Root	Embedded
13	4	1	—	—	—	1	1
17		1		2			

[14] In addition, according to Krasnova [2010: 118] "emotional" questions have steeper rises and falls in their pitch contour compared to information seeking ones. However, her analysis has been carried out on polar questions.

[15] The online Udmurt corpora is excellent to find examples but despite all advantages, it is not suitable for a statistical analysis of evidential marking in questions.

Based on the sample it can be seen, that from the 20 attested questions, 17 of them were constituent questions, and only 2 were polar ones. Although, none of them were formed with the *=a* clitic, i.e., structurally they were not interrogatives. Corpus data show that indirect evidential marking is nonetheless possible in polar interrogatives (cf. (3)). However, the dominance of constituent questions in the sample can tell us about the frequency of evidential marking in different types of questions/interrogative structures.

Based on this sample and my own observations evidential marking in interrogatives is not a commonly attested phenomenon. Also, evidentials in polar interrogatives seem to be less frequent than in constituent ones. San Roque et al. [2017] report on similar findings in their typological research on languages which maintain speaker-anchored perspective in interrogative structures. A possible reason outlined by their study is that in the case of constituent questions the reality of an event is presupposed by the speaker to some extent (ibid.), i.e. the speaker knows that the event has happened but is ignorant for some details (cf. (2), (7)). The Udmurt data seem to confirm this claim.

5. Conclusion

The paper reviewed the occurrence and use of the indirect evidential past tense in interrogatives in Udmurt from a typological point of view. It can be concluded that such forms can occur in different types of interrogative structures without formal restrictions. Evidentially marked interrogatives maintain the speaker's perspective. The interpretation of the indirect evidentials in such constructions is in accordance with their interpretation in their declarative counterparts. They encode the speaker's indirect evidence, and they can also express mirativity. Encoding the speaker's emotional and mental state via the evidentials results in the pragmatic consequence that these questions do not primarily seek for information. In connection with frequency, it can be postulated that evidential marking in interrogative structures and in questions generally is rare.

The findings partially confirm and specify further the previous observations about the topic. From a structural point of view, up to this point indirect evidentials were observed only in polar questions, however, none of the cited examples contain the polar interrogative clitic. Examples have shown that indirect evidentials are compatible with the polar interrogative clitic *=a*. They also appear in constituent and alternative question structures as well. Considering the perspective encoded by the evidential, the current findings confirm the

previous claim (e.g. speaker-anchored perspective). The interpretation of evidentially marked questions show that they do not only encode assumption, but rather indirect evidence in general. Also, they are attested in canonical (cf. example (2), (3), (7), (8)) and special questions (cf. examples (10), (11), (12a)). Observations about frequency can also be specified, namely, that indirect evidential forms occurred more often in constituent questions. Also, a possible pragmatic consequence is outlined of the use of indirect evidentials in in interrogative structures.

Furthermore, the Udmurt data confirm two typological claims proposed by San Roque et al. [2017]. One is that the speaker-anchored perspective in interrogatives is typical for languages which have a non-differentiated indirect evidential marker (cf. section 4.2). The second one is that speaker-anchored evidentials are typologically more frequently observed in constituent questions (cf. section 4.4).

Abbreviations

1, 2, 3 — 1st, 2nd, 3rd person; ACC — accusative; ADV — adverbialis; EV.PST — evidential past tense; CAR — caritive; CAUS — causative; CVB — converb; DET — determinative; FUT — future tense; GEN — genitive; INF — infinitive; INE — inessive; INS — instrumental; ILL — illative; NMLZ — nominalizer; PRS — present tense; PST — past tense; PL — plural; POSS — possessive; PP — postposition; PTC — particle; PTCP — participle; SG — singular; Q — question clitic.

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Локативы это не падежи: данные лакского языка

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Генеративистский подход к падежам как к признакам именной группы, отражающим ее связь с другой составляющей, несовместим с местными падежами, которые и кодируют семантические соотношения, и наслаиваются друг на друга, заставляя предположить наличие независимых синтаксических вершин. Я предлагаю анализировать лакские местные падежи как именные суффиксы с осевой семантикой, как *top* в *tabletop*.

Ключевые слова: падеж, местные падежи, нахско-дагестанские языки, лакский язык.

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Locatives are not cases: Evidence from Lak

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The generativist view of cases as features of an NP reflecting a relation to another constituent is incompatible with locative cases, which both encode semantic relations and stack in ways that indicate an independent syntactic projection. I will argue that Lak locative cases are best treated as nominal suffixes with axial semantics, like *top* in *tabletop*.

Keywords: Case, locative cases, Nakh-Dagestanian, Lak.

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1. Introduction: Case, locative cases, and Lak

Case is usually defined as a system of marking a relation established between an NP and another element in the structure, as in [Blake 1994: 6]: "Case is a system of marking dependent nouns for the type of relationship they bear to their heads". In the generative syntax Case has been implemented as a *feature* (or a feature bundle) on the noun phrase that varies in function of what that noun phrase establishes an (agreement) relation with (a functional head in a certain configuration for structural cases, the theta-assigner for inherent cases).[1] As is easy to see, this basic view is incompatible with semantic cases, of which locative cases are a principled subpart. In this paper I will argue that the so-called "locative cases" of Lak are in fact contentful morphemes.

Lak (*lbe*, a Nakh-Dagestanian language of Northeast Caucasus) has a rich system of locative affixes. While [Муркелинский 1971] advances the hypothesis that these affixes are postpositions, they are far more usually described as cases ([Жирков 1955; Казенин 2013; Тестелец 2019], etc.). The locative specification of a noun phrase is constructed, as is usual for this group of languages, by the combination of a "series" marker (indicating the spatial relation) and a "mode" marker (indicating the type of movement or lack thereof). The spellout of locational affixes is agglutinative (1): all dynamic (directional, or "mode") suffixes are added on top of the essive (locative, "series") ones. The affixes are attached to the noun in its oblique form (indicated by the suffixal augment to be discussed below), while adjectives, demonstratives, etc., are not marked for case ([Жирков 1955: 45]).

(1) a. *q:at-lu-v*(*u*) — inessive, I-a
house-OBL-IN
'in the house' [Жирков 1955: 36]

b. *q:at-lu-vu-x* — intranslative, IV-a
house-OBL-IN-TRS
'through the house' [Жирков 1955: 36]

c. *q:at-lu-lu-x* — subtranslative, IV-f
house-OBL-SUB-TRS
'across under the house' [Жирков 1955: 37]

[1] One variant of this view (e.g., [Toman 1994; Watanabe 2006]) is that Case is not a property of the noun phrase (NP, DP) but rather of a special functional projection KP taking that noun phrase as a complement. For our purposes this makes no difference.

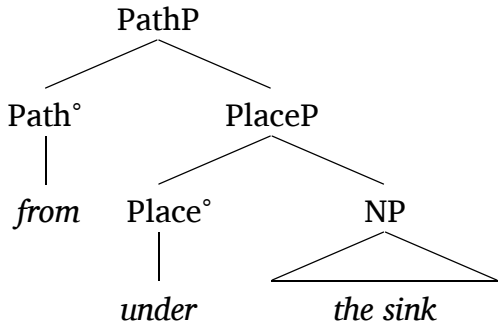
This highly agglutinative nature of Nakh-Dagestanian case systems (see [Mel'čuk 2006; Daniel, Ganenkov 2009; Radkevich 2010; Казенин 2013; Тестелец 2019], among many others) has led [Comrie, Polinsky 1998] to conclude the locative sub-domains of this case system should not be viewed as a list of cases on a par with the core cases of Indo-European languages and structural case.

Table 1. Lak locative cases

	essive	**allative**	**elative**	**translative**	**versative**
a. *-v*(*u*) 'in'	∅	*-n*	*-a*(*tu*)	*-x*	*-maj*
b. *-j* 'on'	∅	*-n*	*-a*(*tu*)	*-x*	*-maj*
c. *-lu* 'under'	∅	*-n*	*-a*(*tu*)	*-x*	*-maj*
d. *-x* 'behind'	∅	*-n*	*-a*(*tu*)	*-x*	*-maj*
e. *-č'a* 'near'	∅	*-n*	*-a*(*tu*)	*-x*	*-maj*
f. *-c'* 'next to'	∅	*-n*	*-a*(*tu*)	*-x*	*-maj*
	'at'	'to'	'from'	'via'	'towards'

In fact, as already noted in [van Riemsdijk, Huybregts 2002], locative case composition follows the usually assumed syntax for paths ([Jackendoff 1973; 1983; 1990; Koopman 2000; den Dikken 2003], etc.): paths are constructed on the basis of places, as shown in (2). The fact that the static (essive) mode in Lak does not have an overt suffix (1a) supports this intuition.[2]

(2) general consensus



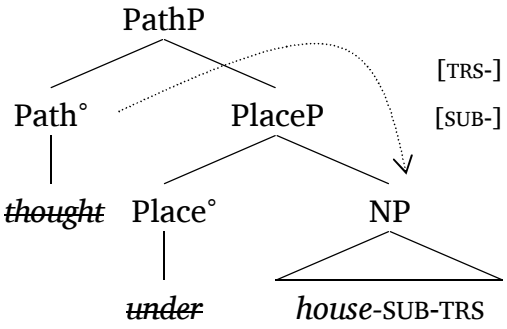
One view of Lak (and generally, ND) locative systems is that the locative affixes are in fact the functional heads Place° and Path° in (2), i.e., adpositions ([Муркелинский 1971] for Lak, [van Riemsdijk, Huybregts 2002] for

[2] Such is not always the case in ND languages: in Akhvakh and Tindin essives are marked ([Radkevich 2010: 4] without reference; [Магомедбекова 1967: 61]: Akhvakh essive is marked with *-e-* alternating with *–i-*).

Lezgian).[3] If, however, they are regarded as cases, i.e., as features of the noun phrase ([Жирков 1955; Казенин 2013; Тестелец 2019], etc.), several problems arise.

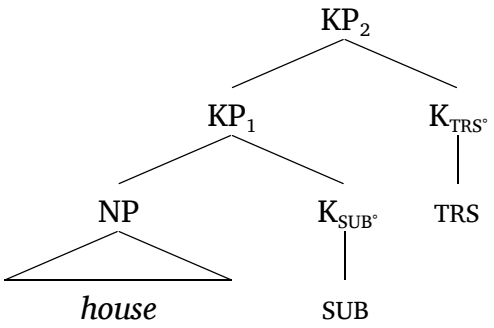
As is obvious from both its semantics and its morphology, a dynamic case, such as a sublative, consists of two sub-features: [sub] 'under' and [trs] 'through' reflecting the features of Place (*under*) and of Path (*through*). Supposing the structure in (3), in order for the two features to be realized agglutinatively in the order in (1c), it is necessary to assume that they are ordered already on the NP. In other words, we need a structured case-feature bundle, and its structure has to reflect the order of assignment.

(3) a. subtranslative, IV-f (1c)



The need for this structure appears to be successfully resolved under the view (e.g., [Caha 2007; 2008; 2010]) where each case corresponds to some *functional projection* KP on top of an NP. Under this view, there is no case-feature assignment, there is selection for a certain KP, and the specific morphemes *-lu* 'under' and *-x* 'via' are realizations of the relevant KPs:

(3) b. subtranslative, IV-f (1c)



[3] Lak has "postpositions" that are distinct from "case markers", we will return to this issue in section 2.3.

The same questions arise, however: how come the order of the two KPs reflects the order of the functional P-heads assigning the relevant cases? Note that if the semantics of 'under' and 'through' is present at K_{SUB}° and K_{TRS}°, respectively, the question arises of how these K-heads are different from adpositions.

It seems therefore reasonable to hypothesize with [Муркелинский 1971] that Lak locative cases are actually adpositions. It turns out, however, that this solution is insufficient.

2. Lak locative affixes as heads rather than features

As discussed above, Lak locative suffixes have clear semantic import, which is not the case for prototypical cases, such as dative or genitive.[4] Treating them as cases, i.e., as reflections of another element in the derivation, would entail postulating at least nine phonologically null prepositions with different semantics (the five localizing ones and the four non-stative modes).

It would also mean the existence in the language of several cases that can *only* be assigned by these null prepositions: thus, for instance, the elative suffix *-a* does not occur anywhere except on top of some localizing affix (as well as of certain locative adverbials, like *šava* 'home' or *lagma* 'around', on which see [Жирков 1955: 127; Муркелинский 1971: 246]). It seems unreasonable to have a case assigned by only one null morpheme. In addition to these logical arguments, we also have some morphosyntactic reasons against treating Lak locative suffixes as cases.

2.1. Versative

The versative "mode" suffix is special in two ways (4)–(5). Firstly, unlike the allative, elative and translative suffixes, it combines with allatives rather than with essives. Secondly, it contains a class marker agreeing with the absolutive argument ([Жирков 1955: 39–40; Муркелинский 1971: 87]), which is most often also the subject of motion.[5] This kind of agreement also characterizes some other Lak spatial expressions, including *šava* 'home' (which can be lexically specified to bear uninterpretable class features).

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[4] Though, as shown by [Cysouw, Forker 2009; Daniel, Ganenkov 2009], locative cases may have non-spatial uses approaching them to core structural cases, the same is true of adpositions (cf. *on* in *depend on*).

[5] On agreeing adpositions, focus particles and adverbials in languages of the same area see [Кибрик 1999: 182–183, 376, 410–412, 608–620] on Tsakhur, [Bond, Chumakina 2016], [Polinsky et al. 2017] on Archi, [Rudnev 2020] on Avar, among others.

(4) a. *oˤrč’* *q:at-lu-vu-n-∅-aj* *lavgunni.*
boy$_{I}$.ABS house-OBL-IN-ALL-AGR$_{I}$-VERS went
‘The boy went towards the inside of the house.’

b. *ssil* *ninu* *q:at-lu-vu-n-**n**-aj* *durcunni.*
sister.GEN = ERG mother$_{II}$.ABS house-OBL-IN-ALL-AGR$_{II}$-VERS brought
‘The sister brought the mother inside the house.’ [Жирков 1955: 42]

(5) a. *o‘rč’* *aqu-∅-vu-n-∅-aj* *la**v**gunni.*
boy$_{I}$.ABS garden-OBL-IN-ALL-AGR$_{I}$-VERS went.AGR$_{I}$
‘The boy went towards the garden.’

b. *š:arrsa* *aqu-∅-vu-n-**n**-aj* *la**r**gunni.*
woman$_{II}$.ABS garden-OBL-IN-ALL-AGR$_{II}$-VERS went.AGR$_{II}$
‘The boy went towards the garden.’

c. *baˤrč* *aqu-∅-vu-n-**m**-aj* *la**v**gunni.*
calf$_{III}$.ABS garden-OBL-IN-ALL-AGR$_{III}$-VERS went.AGR$_{III}$
‘The calf went towards the garden.’ [Муркелинский 1971: 66]

On the assumption that inflectional affix ordering by default reflects the order of syntactic merge, the position of an agreement affix indicates that the versative is not a feature on an NP but an independent functional head. Indeed, other forms of the NP do not agree, so the class agreement marker cannot be a property of the NP itself. If the versative suffix were not an independent head, the class marker would have to appear on an additional functional head (i.e., the versative adposition assigning it). However, the class marker is located between the versative suffix and the NP, while the putative versative P° would necessarily appear either on the left or on the right periphery, leading to an incorrect order:

(6) a. *[$_{FP}$ ***n***- [$_{NP}$ *q:at-lu-vu-n-* *aj*]] if P is right-branching
$P_{VERS°III}$ house-OBL-IN-ALL- VERS

b. *[$_{FP}$ [$_{NP}$ *q:at-lu-vu-n-* *aj*-] ***n***] if P is left-branching
house-OBL-IN-ALL- VERS $P_{VERS°III}$

We conclude that the versative affix must be an independent functional head. The fact that it combines with allatives rather than with essives can then be explained in two ways: either as case-assignment (if the versative P° assigns the allative case) or as semantic role (if the versative is regarded as a non-intersective modifier of the allative). Under the latter view, the semantics of

versative would be defined as in (7): taking a set of paths p and returning another set of paths, r, such that there exists in that set a path, p′, that r is part of yet does not include its endpoint. In Lak, however, independent evidence may be provided in favor of the former hypothesis.

(7) $[[\text{VERS}]] = \lambda p \in D_{\langle \text{path}, t \rangle}.\lambda r \in D_{\text{path}}.\exists p' \in p.r \subset p' \wedge \text{ENDPOINT}(p') \in r$,
where the endpoint of a path is defined as in [Zwarts, Winter 2000].

One problem with (7) is that it does not extend to the related language Avar, where, as noted by [Тестелец 2019: 40], the same suffix may combine with allative (yielding the versative, ‘towards’) or with elative (yielding the directive elative, ‘from the direction of’). In this latter case the starting point rather than the endpoint would have to be excluded.[6] This strongly suggests that semantically the versative/terminative suffix combines directly with the locus rather than with the corresponding paths, and independent evidence may be provided in favor of this hypothesis.

2.2. Mode markers

There is evidence that unlike other mode suffixes, allative (*-**n***) is a case-marker. Firstly, as discussed above, it can be embedded (4)–(5), and it is the only mode with this ability. Secondly, as noted by [Бокарев 1948: 63; Жирков 1955: 39], the allative case in Lak is syncretic with the dative:

(8) a. *butta-l* *duš-ni-**n*** *lu* *lavsunni*. dative
father.OBL-ERG girl-OBL-DAT book.ABS gave
‘The father gave the girl a book.’ [Жирков 1955: 41]

b. o*‘rč’* *q:at* *-lu-vu-**n*** *uvx:unni*. allative
boy$_{I}$.ABS house -OBL-IN-ALL entered.AGR$_{I}$
‘The boy entered the house.’ [Жирков 1955: 41]

The assumption that the “allative” is actually the dative solves the versative issue: the versative can be straightforwardly defined modally as a set of paths that would end at its locus argument in the normal course of events, while the

[6] Furthermore, as also noted by Testelets, the Avar directive elative does not exclude the starting point, which suggests that it subsumes the elative it is based on and only receives its non-initiative interpretation pragmatically: when the starting point is known to be excluded, bare elative is used and directive elative is used otherwise. We leave the precise interpretation of the versative and of the directive is an issue for future research.

allative use of the dative can be assumed to arise from case-assignment by the verb.[7] The elative ('from') and the translative ('via') markers, on the other hand, seem most reasonably analyzable as postpositions, as suggested by [Муркелинский 1971]: while we see no independent evidence for or against this view, treating them as cases necessitates the postulation of the corresponding null postpositions, which seems like a less economical solution.

2.3. Series markers

The major argument against treating series markers as cases is the fact that they feed derivational processes: as illustrated in (9), they appear in complex nouns formed with the location suffix *-alu-* ([Жирков 1955: 33; Абдуллаев, Эльдарова 2000: 27]).[8] Similar nominalizations in Russian (e.g., *primorje* 'sea-side', from *pri* 'by, near' and *more* 'sea') are derived from locative PPs.

(9) a. *lamu-x-alu*
bridge-POST-area
'the area beyond the bridge'

b. *vi-v-alu*
inside-IN-area
'the interior'

A possible objection could be that Lak postpositions combine with the NP in the genitive case, whereas series markers combine, like the core cases, with the so-called oblique stem, derived with a root-specific augment (glossed as OBL in (1), (4), (5), (8)) or even suppletive, as in (8a): the absolutive form for 'father' is *ppu* ([Жирков 1955: 43]).

This objection is easily met, as this oblique stem is also what is used in compounds (10)–(11) ([Жирков 1955: 41; Муркелинский 1971: 124]), which entails that it is simply the Elsewhere form.

(10) a. *ttar-li-l*
conifer-OBL-GEN
'of {a/the} pine, fir-tree'

b. *ttar-li-x'a-v*
conifer-OBL-copse-IN
'in {a/the} conifer copse'

[7] Alternatively, a null dative-assigning null preposition can be hypothesized. The choice between the two solutions would be determined by the possibility of having an allative NP inside a noun phrase, as in *the road to Paris*.

[8] It should be noted that what looks like genitive case morphology can be found in compounds, e.g., in numeral-containing compounds like *trëxnogij* 'three-legged', from *tri* 'three' and *noga* 'leg' in Russian. Yet here the genitive ending seems to be a marker of the specific configuration rather than a derivational suffix and alternates with the usual compound linker *o/e* (e.g., *odnonogij* 'one-legged', from *odin* 'one', or *tysjačenogij* 'thousand-legged', from *tysjača* thousand').

(11) a. *lasn-a-l*
husband/spouse-OBL-GEN
'of the husband'

b. *lasn-a-ussu*
husband/spouse-OBL-brother
'brother-in-law'

Irrespective of the status of this augment, stative locative forms can be reasonably assumed to have the syntax of compounding, with Lak series markers viewed as bound nominal roots (like the English *-ware* in *silverware* or *-top* in *tabletop*, *rooftop*, etc.). From the point of view of their semantics, they can be assimilated to axial parts ([Svenonius 2006; 2008]), which Matushansky and Zwarts [2019] argue to be nouns denoting locations rather than entities. Essive forms can therefore be nominal compounds with the semantics of loci (places): their syntax is that of locative adjuncts (or arguments), though they also exhibit nominal properties (see [Matushansky 2019] for the hypothesis that both denotations are available for a noun).

If the stative locative "series" create nouns, it is unsurprising that these derived nouns can be case-marked with dative. The fact that they are marked with no other case is explained by the fact that they cannot appear in argument positions (where entity-denoting NPs would be required).

Independent support for this view comes from the so-called "spatial postpositions" in Lak: freestanding morphemes with the same spatial semantics and often, a similar phonological form:

Table 2. Lak postpositions ([Жирков 1955: 50, 129; Муркелинский 1971: 247])

"series markers"	**"postpositions"**
-v(u) 'in'	*viv* 'inside'
-j 'on'	*jalu* 'in top of'
-lu 'under'	*lu* 'underneath'
-x 'behind'	*maq* 'behind' *qiriv* 'at the back of'
-č'a 'near'	*č'arav* 'nearby, beside'
-c' 'next to'	*čulux* 'close by'

Four out of the six series markers are transparently connected to the corresponding "postpositions": most clearly, the superessive *jalu* consists of the "series" marker *j-* 'on' combined with the aforementioned nominalizer *-alu-* used to create names of locations ([Муркелинский 1971: 103]).

Just like the locus-denoting compounds that we have hypothesized above, all these "postpositions" combine with the mode suffixes (e.g., *vivu-naj* 'towards

the inside', *viv-atu* 'from the inside'), yet with no other "cases" of Lak. Just like nouns, they all assign genitive case to their complements, which can always be omitted (and then these "postpositions" would function as spatial adverbials with a deictic or anaphoric reference point, cf. the English *behind*). Like series markers, they lend themselves to temporal meanings (e.g., *maq* can also mean 'after'), further supporting the hypothesis that they belong to the same semantic domain.

All these facts can be explained if these "postpositions" are free locative nouns (e.g., *č'arav* 'side', *jalu* 'top'), while the "series markers" (*-v*, *-j*) are their bound counterparts. Both denote in the locative domain and are therefore incompatible with argument positions.[9]

2.4. Summary

We have offered evidence against treating Lak locative affixes as cases. For the versative marker, the fact that it agrees with the absolutive argument strongly suggests that it is an independent syntactic head, and the position of the class marker further shows that it is the affix itself that realizes this head.

The semantics of the versative argues that it combines with a location rather than a path, contrary to what its morphosyntax suggests: the allative marker that the versative requires is unlikely to encode the allative semantics. However, given that the allative and the dative are syncretic in Lak, it seems reasonable to assume that allative is in fact dative. The other "mode" suffixes, the elative and the translative, can be readily analyzed as postpositions.

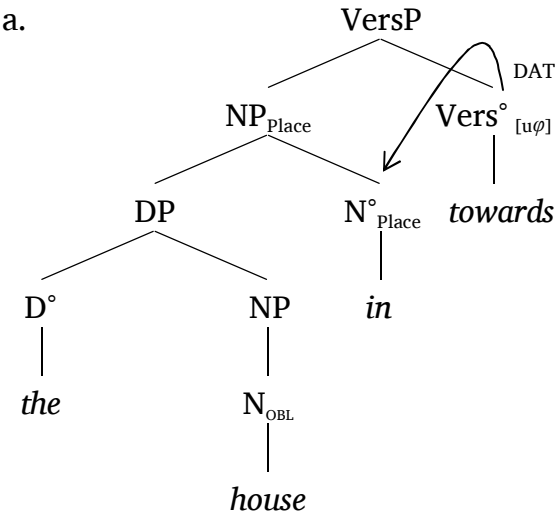
The remaining class of locative suffixes, the so-called "series" suffixes, have been argued to be bound nominal counterparts of locative nouns denoting axial parts. Evidence for this view comes from both the existence of purely spatial nouns (adverbs, in traditional terminology) and from the ability of both bound and free localizers to be marked with the dative case. While in other languages (e.g., Chalcatongo Mixtec ([Brugman 1981], see also [Svorou 1994]), Kîîtharaka ([Muriungi 2006])) axial nouns have been shown to mix nominal properties with locative semantics, referring in both domains, it is only in Lak that they would be assumed to have a purely locative semantics.

[9] Lak has other locative adverbials that only have locative cases ([Жирков 1955: 129], see [Daniel, Ganenkov 2009] for the same phenomenon in Bagvalal), e.g., *x̂:ič'* 'in front', *daˁniv* 'between', as well as some toponyms ([Муркелинский 1971: 103]).

3. Analysis

Putting together what has been suggested so far, Lak stative locative suffixes can be described as phrasal affixes: from the semantic standpoint they combine with entire noun phrases, even though morphologically they form a nominal compound with the head noun. The nominal head (N°) is marked oblique as the non-absolutive default. The versative adposition (with its unvalued class feature) takes NP_{Place} as its complement, to whose head it assigns dative case:

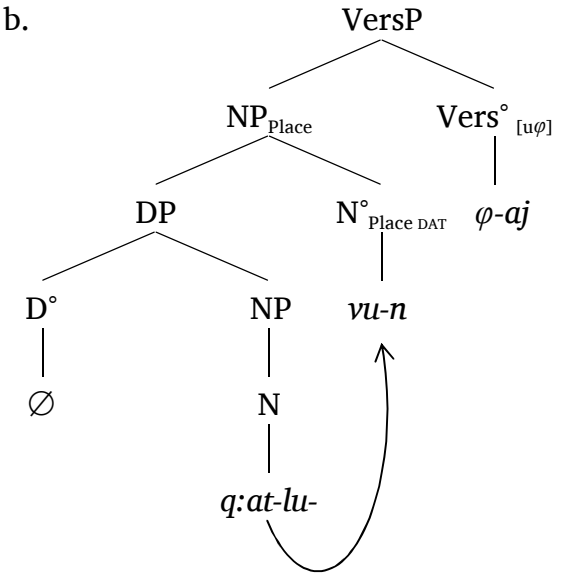
(12) a.



The linear sequence *q:at-lu-vu-n-∅-aj* in (4a) can arise in a variety of ways. The versative adposition [*φ*]-*aj* might be a phonological clitic and cliticize to the essive-cum-dative suffix *vu-n*. The syntactic structure remains intact.

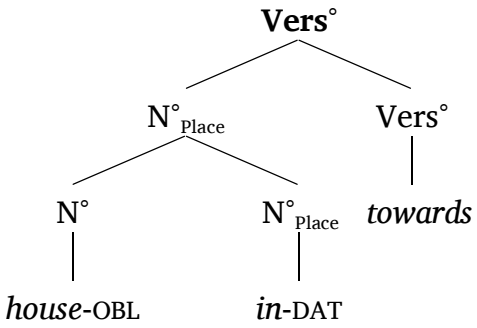
Alternatively, the oblique-marked noun head-moves into the dative-marked locative nominal head $N°_{Place}$, yielding a complex head (*house-in*):

(12) b.

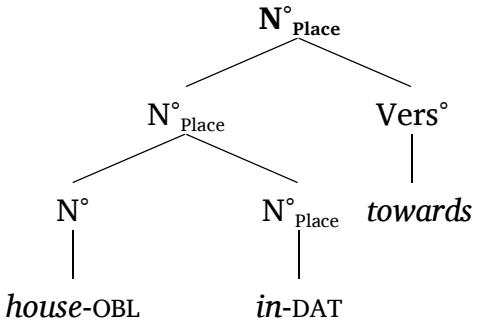


The resulting complex can head-move into the versative head (12b) or merge with it by any of the known morphosyntactic mechanisms like m-merger or Lowering (12d); the only difference is in the label:

(12) c.



d.



As is easy to see, the structure and the derivation would be the same if we were to assume that the inessive suffix *-v(u)* 'in' is a P° rather than an N°. The problem with this alternative would be the status of the allative/dative suffix: as adpositions cannot be case-marked, *-n* 'to' would have to be a contentful postposition, with the subsequent issues for the semantics of the versative as discussed above.

Finally, the hypothesis that locative morphemes can be a type of nominal heads forming a compound with the GROUND nominal explains the peculiar syntax of Lak locative affixes and supports adding a new route to the grammaticalization cline in [Lehmann 1985]: adpositions can also develop from axial part nouns. The case of Lak, whose locative suffixes seem to occupy an intermediate position between functional (P°) heads and lexical axial parts would be a case in point.

3.1. Further questions: the approximative series

Zhirkov claims an additional incomplete locative case, the approximative (aka, apudlocative) one with the interpretation similar to the Russian *u* 'at/by':

(13) a. *q:at-lu-x̂*
house-OBL-APPROX
'by the house' [Жирков 1955: 37]

b. *q:at-lu-x̂:-un*
house-OBL-APPROX-ALL
'towards the house'

As a further point of similarity to the Russian *u* 'at/by', [Муркелинский 1971: 86] calls this case the possessive one and claims that the general ablative case *š:a* 'from' (treated by Zhirkov as being outside the locative paradigm) is formed from it, with the reduplicated *x̂:* turning into *š:* by a more general phonological process and *a* regarded as the elative suffix. The same analysis is proposed in [Бокарев 1948: 63], hypothesizing that the original meaning of this case was 'before'. If these analyses are right, the full locative paradigm should look as follows:

Table 3. Lak locative marking

	ESS	**ALL**	**ELA**	**TRS**	**VERS**	**P**
'in'	*-v*	*-vun*	*-va(tu)*	*-vux*	*-vunmaj*	*viv*
'on'	*-j*	*-jn*	*-ja(tu)*	*-jx*	*-jnmaj*	*jalu*
'under'	*-lu*	*-lun*	*-la(tu)*	*-lux*	*-lunmaj*	*lu*
'behind'	*-x*	*-xun*	*-xa(tu)*	*-xux*	*-xunmaj*	*maq, qiriv*
'near'	*-č'a*	*-č'an*	*-č'a(tu)*	*-č'ax*	*-č'anmaj*	*č'arav*
'next to'	*-c'*	*-c'un*	*-c'a(tu)*	*-c'ux*	*-c'umaj*	*čulux*
'by'	*-x̂*	*-x̂:un*	*-š:a*	—	—	*x̂:ič'* 'before'
	'at'	'to'	'from'	'via'	'towards'	

The connection between the apudlocative and the possessive meanings has also been explored in [Matushansky 2021], noting the same drift in languages as diverse as Russian (*u* 'at/by'), Hebrew (*ecel* 'chez', 'near/at' in Biblical Hebrew) and Dutch (*bij* 'at/by').

3.2. Potential objection: vacuous locatives

One potential argument against treating Lak locative suffixes as adpositions rather than cases is that locative forms can be used in non-locative senses. Thus [Тестелец 2019] considers the dative/allative syncretism in Lak or Avar or the genitive-elative syncretism in Bezhta and Hunzib as evidence for treating both as cases (see also [Бокарев 1948; Казенин 2013]; as well as [Forker 2010] for Tsez, [Ганенков, Ландер 2011] for Dargwa), similar conclusions can be drawn from the use of superessive as an instrument, as in (14)).

(14) a. *žul* *kolxoz-ra-vu* ***traktor-da-x*** *ğaj* *učajs:ar*.
our kolkhoz-OBL-IN tractor-OBL-POST till LV
'In our kolkhoz they till with a tractor.' [Бокарев 1948: 62]

b. ***rik'-ira-x*** *murx̂* *buvtunni*.
axe-OBL-POST tree.ABS cut.PAST
'He cut the tree with an axe.' [Жирков 1955: 43]

This counter-argument, however, is rather weak, as regular adpositions (e.g., the English *to* for many datives) may introduce core arguments, and l-selected PP complements (as in *depend on*) have as little or as much of the semantics of the preposition as do quirky objects. The fact that even "complex prepositions" may acquire non-compositional meanings ((15a) in both Russian and English, see also [Marelj, Matushansky 2015] on *for* and *in* in non-verbal predication) and introduce arguments ((15b) in Hebrew) further shows that the semantic distinction is rather nebulous.

(15) a. *po-* *mimo*
along past/by
'besides'

b. *'al* *yadey*
on hands.CS
'by' (demoted external argument)

We conclude that Murkelinsky's hypothesis cannot be rejected on semantic grounds and emphasize once again that the proposal advanced here (differing from Murkelinsky's only in the assumption that locative suffixes are nominal rather than adpositional) is motivated in this difference by the necessity to deal with the allative/dative case in versatives.[10]

Abbreviations

I, II, III — classes; ABS — absolutive; AGR — agreement morpheme; ALL — allative; APPROX — approximative; CS — construct state; DAT — dative; ELA — elative; ERG — ergative; ESS — essive; GEN — genitive; IN — inessive; LV — light verb; OBL — oblique; PAST — past; PL — plural; POST — postessive; SUB — subessive; TRS — translative; VERS — versative.

[10] One far-fetched stipulation might be that the versative suffix *-φ-maj-* should be regarded along the same way as the English 'on one's way to'. It seems superficially that such an analysis accounts for the semantics, the class morphology (the possessive), the final [j], which can be viewed as identical to the locative morpheme *-j* 'on', and even the interpretable allative. It can furthermore also explain the Avar directive elative (fn. 6) as 'on one's way from'. The disadvantage of this view is that it is to one's peril that one attempts a phonological analysis in a language that one has a little knowledge of as I do of Lak. Hence this hypothesis is relegated to a footnote and thus I am not required to explain why Lak would not have the directive elative that it predicts.

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Интрузивные местоимения в русском языке: экспериментальное исследование*

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В статье исследуется приемлемость интрузивных местоимений в русском языке. Интрузивные местоимения — это местоимения, которые заполняют место следа при извлечении составляющей. Есть свидетельства того, что такие местоимения могут «чинить» предложения, в которых извлечение было неграмматичным. Цель данной работы — экспериментальными методами изучить, увеличивают ли интрузивные местоимения приемлемость предложений с извлечением из островных структур в русском языке. Результаты наших экспериментов показывают, что наличие интрузивных местоимений не только не увеличивает приемлемость, но и снижает ее. Кроме того, существует вероятность того, что разница между приемлемостью извлечения одушевленных и неодушевленных составляющих может быть индикатором типа конструкции.

Ключевые слова: интрузивные местоимения, резумптивные местоимения, островные ограничения, русский язык, экспериментальный синтаксис, суждения приемлемости, градуальность.

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INTRUSIVE PRONOUNS IN RUSSIAN: AN EXPERIMENTAL STUDY*

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Abstract: This paper examines the acceptability of intrusive pronouns in Russian. Intrusive pronouns are pronouns that fill a gap when a constituent is extracted. There is evidence that such pronouns can "repair" sentences in which movement was non-grammatical. The purpose of this work is to study whether intrusive pronouns increase acceptability of island subextraction in Russian using experimental methods. The results of the experiments show that the presence of intrusive pronouns not only does not increase the acceptability but decreases it. In addition, there is a possibility that the difference between acceptability of animate and inanimate constituent extraction can be an indicator of the construction type.

Keywords: Intrusive pronouns, resumption, island constraints, Russian, experimental syntax, acceptability judgments, Likert scale, forced-choice, graduality.

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1. Introduction

Resumptive pronouns are pronouns that fill the gap while being co-indexed with the moved constituent. A distinction between grammatical resumption and intrusive resumption was introduced in [Sells 1984]. Resumptive pronouns can be called grammatical, "true" resumptive pronouns, according to some authors observed, for example, in Hebrew or Lebanese Arabic (see [Sells 1984], [Nomi Erteschik-Shir, 1992]). Grammatical resumptive pronouns are required for use not only in island structures and are in a relationship of free variation with a gap in other cases. On the other hand, intrusive pronouns are used as a "last resort" to ameliorate island effects or to "repair" island structures from which the constituent has moved (see [Polinsky et al. 2013] for the possible reasons of this amelioration). In Russian there are no "true" resumptive pronouns, so, for greater unambiguity, following the distinction introduced in [Sells 1984], we will use the term "intrusive pronouns".

In English, such pronouns are usually judged as inappropriate, but according to some studies intrusive pronouns can improve acceptability of sentences in which the movement from the island structure has occurred (see, for example, [Ross 1967], [Kroch 1981], [McCloskey 1990], [Shlonsky 1992], [Nomi Erteschik-Shir 1992] and [Ackerman et al. 2018]):

(1) *This is the girl who I read in the New York Times yesterday that the awful man who raped *t/her had escaped from prison.* [Nomi Erteschik-Shir, 1992: 90]

In the Russian language, intrusive pronouns have not been studied. E. Lyutikova considered resumptive pronouns in the context of relative sentences with the relative pronoun *kotoryj* 'which' [Lyutikova 2009]. In this work, resumptive pronouns are mentioned, however, E. Lyutikova does not find differences in acceptability in their presence and in their absence (the island of adverbial sentences is considered), from which it is concluded that "As a result, the hypothesis that the resumptive pronoun appears in the position of a trace from an «illegal» extraction does not find confirmation in Russian material" [ibid: 449].

Thus, studies on different languages show rather contradictory results, and there have been no experimental studies on Russian. Corpus studies or observations are difficult regarding the intrusive pronouns due to the relatively low

frequency of such structures. For these reasons, this paper aims to initiate experimental research on intrusive pronouns in Russian.

Another reason why we are interested in Russian data is the observation made in [Salzmann 2006: 282] and [Heestand 2010]. In these works, it is noted that intrusive pronouns are acceptable only in languages with non-agreeing complementizers. Moreover, if a language has both agreeing and non-agreeing complementizer, intrusive pronouns will be possible only with the first ones. One example of those languages is Bulgarian, Slavic language like Russian. Although Russian have both options too — *kotoryj* as agreeing and *čto* as non-agreeing complementizer — *kotoryj* is much more common. Therefore, in this work we will concentrate on it and check if it will go along with the prediction or not. We leave non-agreeing complementizer *čto* for the future research.

This paper is structured as follows: in section 2 we revise the results of different studies on the intrusive pronouns. Sections 3 and 4 are devoted to experimental research — sections 3.1 and 3.2 describe the aims and design of the experiments, section 4 describes the experimental results, which are then discussed in section 5. Section 6 contains conclusions.

2. Previous studies

In this section we are going to look at the most prominent experimental research on intrusive pronouns. We decided to cover works, which are using different experimental methods, since they have shown surprisingly different results.

Amelioration: pro

Ackerman, Frazier, Yoshida (2018) explore the islands of the relative clause, the adjunct clause, and the island of the *wh*-question. At the same time, the acceptability of intrusive pronouns in these island constrictions is compared with their acceptability in non-island structures. Unlike previous studies, in this study they do not use acceptability judgment methods such as the Likert scale or magnitude estimation. Instead, the authors used forced-choice and fill-in-the-blank methods. The results show that intrusive pronouns are more preferable than empty gaps for all island structures, but not for non-island structures. The authors propose two options for interpretation of this result. On the one hand, it might be a real improvement in acceptability (then other methods for

obtaining acceptability estimates simply do not have enough statistical power to register such an effect of this size). Another option is that it can be an improvement of a non-syntactic nature, but a simplification in relation to cognitive load and restrictions on the parser, following in this others (see [Kluender 1991, 1998; Kluender, Kutas 1993; Hofmeister et al. 2013; Kluender, Gieselman 2013]).

Similar reasoning is given in [Beltrama, Xiang 2013]. In this article, sentences with a non-island structure and with an island of relative clause were studied, the embedding depth varied from 2 to 3. Within the framework of this work, a series of four experiments was carried out.

The first experiment was conducted on Italian material with the use of audio stimuli, the experimental sentences were presented in the context of a short dialogue. Respondents were asked to rate the comprehensibility of targeted sentences. The three remaining experiments were conducted on English language. In two of them, respondents also had to evaluate the comprehensibility of sentences with intrusive pronouns and without them on a scale from 1 to 7 (while in one of the experiments there is a context accompanying the experimental sentences, and in the other not). In the fourth experiment, which was also conducted on English material using context it was required to assess acceptability. The results show that sentences with intrusive pronouns do score better when judging comprehensibility and using context. In other cases, sentences with pronouns and intrusive pronouns and with gaps receive either the same scores, or gaps are preferred. Based on this, the authors put forward the assumption that the presence of an intrusive pronoun does not “save” sentences with the movement from the island structure in the direct, grammatical sense, but improves their comprehensibility and perception in general. An experimental study by Ferreira, Swets [2005] demonstrates that sentences with resumptive pronouns within the island are generated more often than sentences with a sentence with a gap. Let’s now consider experimental studies showing the opposite results.

Amelioration: contra

One line of experimental research comes to conclusions that intrusive pronouns do not really improve the level of acceptability. Thus, in [Alexopoulou, Keller 2007] authors investigate intrusive pronouns in English, Greek and German using the magnitude estimation method. For all three languages, a non-island

structure, a weak[1] island of the indirect question (corresponding to the English indirect question with the complementizer ‘whether’), and a strong island of the relative sentence were investigated. In addition, they investigate the interaction of the presence of an intrusive pronoun, the type of island and the depth of embedding of the structure (0–2) from which the extraction was made. It was found that for non-island structures the option without an intrusive pronoun was always more preferable, for a weak island this parameter turned out to be different for different languages. In German and Greek the results were similar to non-island structures; in English the results are similar to extraction from a strong island. For the strong islands, no statistically significant differences were found between sentences with and without intrusive pronouns in all languages. At the same time, while the embedding level consistently worsened the estimates for all types of structures without intrusive pronouns (if this deterioration was not statistically significant between the embedding level 0 and 1, a statistical difference was found between the level 0 and 2 in each case), sentences with intrusive pronouns with increasing embedding level showed an increase in the judgments. However, this does not change the fact that, at best, there was no difference between sentences with intrusive pronouns and sentences without them, while on average sentences with intrusive pronouns were rated significantly worse. Similar results were obtained for the German and Greek languages. Polinsky et al. [2013] study the relative clause island and the adjunct island in English and come to the same conclusions. They consider both wh and non-wh movements and examine acceptability on a Likert scale from 1 to 7. Interestingly, they find no differences between the scores of sentences with and without intrusive pronouns. Similar results were obtained for Swedish [Zaenen et al. 1981] and for Spanish [Sílvia Perpiñán 2020].

Therefore, various authors using Likert scale and magnitude estimation come to the same conclusion: intrusive pronouns either do not change the acceptability or lower it.

[1] It should be noted that the understanding of a weak island, which is used in the above-mentioned article, is not entirely traditional — in it, such islands are considered not as those from which only certain constituents can be removed, but as those from which the removal of constituents is less acceptable than from strong islands. This definition is not generally accepted, however, some of the data we obtained allow us to understand why such assumption was possible.

Summing up, experiments requiring generation and the results of forced choice method result in intrusive pronoun preference. Likert scale shows the same result for intrusive pronouns' acceptability, and they show better results only in comprehensibility test.

3. Experimental study

Since the data obtained using various methods often contradict each other, in this study we used both the acceptability judgment using the Likert scale, and the forced-choice method since the use of these methods has led, for example, [Ackerman et al. 2018] and [Polinsky et al. 2013] to the opposite results described above.

Following [Alexopoulou, Keller 2007], we consider in this paper various island structures — non-island subjunctive relative clauses with complementizer *čtoby* 'so that', potentially weak (at least exhibiting some restrictions on the extraction of components) island structures with indicative complementizer *čto* 'that', as well as strong islands of a complex noun phrase. This choice of materials should help examine the position that Russian language takes typologically with regard to the interaction of various types of island structures and intrusive pronouns. Among other things, the relative acceptability of intrusive pronouns in island and non-island constructions should help in determining whether a certain structure of interest to us is an island or not — if in this work a different pattern is found for different types of structures (as in [Alexopoulou, Keller 2007] and [Ackerman et al. 2018]), this can serve as a guide for future researchers, who will be able to use intrusive pronouns as a kind of indicators. At the same time, in this work, we do not aim to explain the phenomenon of intrusive pronouns — whether they are a grammatical or a discursive psycholinguistic phenomenon. The search for a theoretical explanation is planned to be carried out in future studies. In this case we set ourselves the task of obtaining primary data, which can later be used for theoretical purposes.

3.1. Aim and logic of experiments

In this series of experiments, our goal is to identify how the presence of intrusive pronouns in island structures affects their acceptability in Russian. We test the hypothesis that intrusive pronouns increase acceptability in island structures and decrease acceptability in non-island ones. In doing so, we also test the hypothesis that the weak and the strong islands may behave differently in

relation to intrusive pronouns. Another goal is to compare different experimental methods, as different assumptions arise about their ability to detect the effect of intrusive pronouns.

3.2. Experimental design

In this pilot study, three experiments were conducted. Experiment 1 used an acceptability judgment method Likert scale from 1 to 7. Experiment 2 was carried out using the forced-choice method.

In both experiments, the respondent received instructions before starting the experiment, after which he evaluated five training sentences. The respondent was given 10 seconds to evaluate each stimulus. All experiments were carried out on the Ibexfarm platform [Drummond 2013], respondents were recruited using social networks and the Yandex.Toloka service.

3.2.1. Design of Likert scale experiment

As mentioned above, in experiment 1 we used Likert scale from 1 to 7 (LS). The design of the experiment included two independent variables, one of which had two levels, the other three: (i) the presence of an intrusive pronoun (yes / no), (ii) the type of island (complex noun phrase or CNP as a strong island; relative clauses with indicative complementizer *čto* 'that' — supposedly a weak island,[2] see [Lyutikova, Gerasimova 2021]; non-island subjunctive relative clauses with complementizer *čtoby* 'so that'). That gives us 6 conditions. For each of the 6 conditions, 4 lexicalizations were made, so the experiments included 24 stimulus sentences. The factorial design of the experiment was planned according to the Latin square rule, resulting in 6 experimental sheets.

According to our observations, agentivity of the extracted constituent can affect the results. Because of that, in relation to animacy of the constituent being extracted, the stimulus blocks were split in a 1 to 1 ratio: half of the blocks contained an animate object, half of an inanimate object. At the same time, in the course of the study, we found that the effect of animacy on the acceptability of sentences is higher than we expected, which is we decided to analyze it both as an interfering and as the main variable.

[2] There is no certainty that relative clauses with the complementizer *čto* are actually a weak island — this would be too strong a statement, since the category of such constructions has not yet been finally determined. However, since the extension from such structures is limited, we will allow ourselves to call such structures in this work precisely weak islands, bearing in mind that this is only an assumption about their status.

When analyzing the interfering variables, we decided to fix some of them at one value. We referred to such confounding variables as, for example, the depth of embedding of the island structure. Despite the fact that many researchers have pointed out that how deeply the structure containing the proposed component is embedded depends on the acceptability of sentences (see [Nomi Erteschik-Shir, 1992; Beltrama, Xiang 2013], etc.), in this study, it was decided to fix the embedding depth of the structure on one clause. Besides, in all sentences we examined relative movement of a direct object.

In the example (2) the scheme of the experimental sentenced is given, in the example (3) — the block of experimental stimuli. Prepositional groups have been added to make the sentences more natural.

(2) a. PP$_{LOC}$-verb-object, *kotoryj* 'which'-subject-verb + CNP + *čto*-subject of an embedded clause-verb-PP$_{TEMP}$

b. PP$_{LOC}$-verb-object, *kotoryj* 'which'-subject-matrix verb-*čto*-subject of an embedded clause-verb-PP$_{TEMP}$

c. PP$_{LOC}$-verb-object, *kotoryj* 'which'-subject-matrix verb-*čtoby*-subject of an embedded clause-verb-PP$_{TEMP}$

(3) a. complex noun phrase (strong island), gap

na	*stene*	*visel*	*proekt*	*ustanovki,*	*kotoruju*	*papa*	*sdelal*
on	wall	hung	project	device.GEN	which.ACC	father	made

zajavlenie	*čto*	*petja*	*postroil* _	*za*	*kanikuly.*
announcement	that	Petya	built	during	holidays

'On the wall hang the project of the device which father made an announcement that Petya built _ during the holidays.'

b. *čto* relative clause ("weak" island), gap

na	*stene*	*visel*	*proekt*	*ustanovki,*	*kotoruju*
on	wall	hung	project	device.GEN	which.ACC

papa	*dumaet*	*čto*	*petja*	*postroil* _	*za*	*kanikuly.*
father	thinks	that	Petya	built	during	holidays

'On the wall hang the project of the device, which father thinks, that Petya built _ during the holidays.'

c. *čtoby* relative clause (non-island), gap

na	*stene*	*visel*	*proekt*	*ustanovki,*	*kotoruju*	*papa*	*hočet*	*čtoby*
on	wall	hung	project	device.GEN	which.ACC	father	wants	so.that

petja	*postroil*	_	*za*	*kanikuly.*
Petya	built		during	holidays

'On the wall hang the project of the device, which father wants Petya to build _ during the holidays.'

d. complex noun phrase (strong island), intrusive pronoun

na	*stene*	*visel*	*proekt*	*ustanovki,*	*kotoruju*	*papa*	*sdelal*
on	wall	hung	project	device.GEN	which.ACC	father	made

zajavlenie	*čto*	*petja*	*postroil*	***eë***	*za*	*kanikuly.*
announcement	that	Petya	built	**it.ACC**	during	holidays

'On the wall hang the project of the device which father made an announcement that Petya built **it** during the holidays.'

e. *čto* relative clause ("weak" island), intrusive pronoun

na	*stene*	*visel*	*proekt*	*ustanovki,*	*kotoruju*	*papa*	*dumaet*	*čto*
on	wall	hung	project	device.GEN	which.ACC	father	thinks	that

petja	*postroil*	***eë***	*za*	*kanikuly.*
Petya	built	**it.ACC**	during	holidays

'On the wall hang the project of the device, which father thinks, that Petya built **it** during the holidays.'

f. *čtoby* relative clause (non-island), intrusive pronoun

na	*stene*	*visel*	*proekt*	*ustanovki,*	*kotoruju*	*papa*	*hočet*	*čtoby*
on	wall	hung	project	device.GEN	which.ACC	father	wants	so.that

petja	*postroil*	***eë***	*za*	*kanikuly.*
Petya	built	**it.ACC**	during	holidays

'On the wall hang the project of the device, which father wants Petya to build **it** during the holidays.'

Besides, each experimental list included 24 fillers, 12 of which, according to my introspection, were rated 6–7 (these included sentences with relativization, but without violating island restrictions, see example (4)), as well as 12 fillers preliminary estimated at 1–2 — the gap was filled in them with a full noun phrase (see example (5)). This differentiation of fillers is intended to set "standards" of acceptability and unacceptability, as well as to determine the boundaries of the scale for each individual respondent.

(4) grammatical filler

v *škafu* *viselo* *plat'e,* *kotoroe* *maša* *kupila,* *čtoby* *nadet'*
in closet hang dress which.ACC Masha bought so.that wear

na *vypusknoj.*
on prom
'There hung a dress in the closet that Masha bought to wear at the prom.'

(5) ungrammatical filler

v *pole* *stojal* *tractor* *kotoryj* *pëtr* *znal,*
in field stood tractor which.ACC Pyotr knew

čto *lëša* *kupil* *mašinu* *na* *prošloj* *nedele.*
that Lyosha bought car.ACC on last week
'There stood the tractor in the field that Peter knew that Alex bought a car last week.'

Thus, each experimental sheet included 48 sentences. After each grammatical filler, a test question was asked. The respondents who gave less than 50% of correct answers to such questions were excluded from the analysis.

3.2.2. Design of forced-choice experiment

Experiment 2 used the same set of independent variables, as well as the same number of stimuli per condition and the same ratio of stimulus sentences and fillers. However, unlike Likert scale experiment, in experiment 2 we used the forced-choice method: the respondents were required to make a choice between two options of sentence completion — with and without an intrusive pronoun. This method was chosen to presumably reduce the load on the cognitive apparatus during the experiment: the respondent did not have to read similar sentences twice and look for differences in them, which, it seems, should have reduced the load, given the considerable number of stimuli. Each experimental block included three sentences, each with two options for completion. As a consequence, there were three experimental sheets in the experiment. Example (6) demonstrates one of the experimental blocks.

(6) a. complex noun phrase (strong island)

na *stene* *visel* *proekt* *ustanovki,* *kotoruju*
on wall hung project device.GEN which.ACC

papa *sdelal* *zajavlenie,* *čto* *petja …*
father made announcement that Petya

‘On the wall hang the project of the device which father made an announcement that Petya …’

- *postroil _ za kanikuly.*
  built during holidays
  ‘… built _ during the holidays.’

- *postroil **eë** za kanikuly.*
  built **it.**ACC during holidays
  ‘… built **it** during the holidays.’

b. *čto* relative clause (“weak” island)

na stene visel proekt ustanovki, kotoruju
on wall hung project device.GEN which.ACC

papa dumaet , čto petja …
father thinks that Petya
‘On the wall hang the project of the device which father thinks that Petya …’

- *postroil _ za kanikuly.*
  built during holidays
  ‘… built _ during the holidays.’

- *postroil **eë** za kanikuly.*
  built **it.**ACC during holidays
  ‘… built **it** during the holidays.’

c. *čtoby* relative clause (non-island)

na stene visel proekt ustanovki, kotoruju
on wall hung project device.GEN which.ACC

papa hočet, čtoby petja …
father wants so.that Petya
‘On the wall hang the project of the device which father wants Petya to …’

- *postroil _ za kanikuly.*
  built during holidays
  ‘… build _ during the holidays.’

- *postroil **eë** za kanikuly.*
  built **it.**ACC during holidays
  ‘… build **it** during the holidays.’

Fillers had the same structure as experimental sentences. At the same time, fillers in this experiment were divided into three types. In fillers of the first type the choice between options was unambiguous — one of the options was obviously more acceptable than the other:

(7) unambiguous filler

v	*cirke*	*vystupali*	*klouny,*	*kotorye*	*delali*	*vsë,*	*čtoby …*
in	circus	performed	clowns	which.PL	did	everything	so.that

'Clowns performed in circus, who did everything so that …'

- *zriteli* *ix* *poljubili* *poskoree.*
  audience them fall.in.love sooner
  '… the audience fell in love with them as soon as possible.'

- *zriteli* *ego* *poljubili* *poskoree.*
  audience him fall.in.love sooner
  '… the audience fell in love with him as soon as possible.'

In the second group, both options were, according to my introspective perception, equally acceptable:

(8) filler with two equally acceptable options

na	*čerdake*	*žili*	*golubi,*	*kotorye*	*kurlykali*	*tak*	*gromko, čto …*
on	attic	lived	pigeons	which.PL	were.humming	so	loudly that

'In the attic lived pigeons who were humming so loudly that …'

- *babuška* *ne* *mogla* *usnut'* *noč-ami.*
  grandmother not could fall.asleep night-INST.PL
  '… grandmother could not sleep at night.'

- *babuška* *ne* *mogla* *usnut'* *po* *nočam.*
  grandmother not could fall.asleep on nights
  '… grandmother could not sleep at night.'

Both options in the third group were equally unacceptable, the gap in them was filled with either a full noun phrase or a relative pronoun:

(9) filler with two equally unacceptable options

na	*stene*	*visel*	*akkordeon,*	*kotoryj*	*maša*	*vyskazala*	*mysl',*	*čto …*
on	wall	hung	accordion	which.ACC	Masha	expressed	thought	that

'There hung an accordion on the wall, which Masha expressed the idea that …'

- *kostja kupil akkordeon včera.*
  Kostya bought accordion yesterday
  '… Kostya bought an accorion yesterday.'

- *kostja kupil kotoryj včera.*
  Kostya bought which.ACC yesterday
  '… Kostya bought which yesterday.'

This selection of filler groups was made in order to find out exactly how respondents react to different combinations of acceptable and unacceptable options. Given that there is a possibility that sentences with and without an intrusive pronoun are equally unacceptable, such a selection seems justified. At the same time, since filler sentences were not aligned and not divided into variables, and their number itself is not enough for serious conclusions, the data obtained with their help will give only the most general idea of the principles of choosing between variants of the same or different (un)grammaticality, which is possible, will change with more detailed research.

2.3. Experiment participants[3]

In experiment 1, 112 people from 14 to 61 years old took part. The average age of the participant was 26 years, sd = 10.719, 74% of the respondents were women, 26% were men. 31 participants indicated that they have a linguistic education. Distribution of respondents by experimental lists was: 16–21–12–19–14–30[4].

In experiment 2, 89 people from 13 to 58 years old took part. The average age of the participant was 23 years old, sd = 8.12, 76% of the respondents were women, 24% were men. 30 participants indicated that they have a linguistic education. Distribution of respondents by experimental lists was: 29–26–34.

In total, we removed the data from 5 people who systematically exhibited the same scores for all stimuli and/or incorrectly answered test questions.

[3] All the data presented below were given by the respondents themselves and were not verified in any way, therefore it can only provide an approximate picture of the social characteristics of the respondents.

[4] This disbalance of respondents is due to random distribution. However, it has not skewed the results — every type of rearrangement and mixing of the results showed the same picture.

3. Experimental results

In this section, we present the results of our experiments. In experiments 1, the scores obtained using the Likert scale were normalized (z-score transformation).

As already mentioned above, when analyzing the results, the effect of animacy of the extracted object on the acceptability of sentences was found. For this reason, this section will present both the results without taking into account animacy (where, as we assume, the effect of animate and inanimate objects balances each other), and the results in which animate is taken into account as the main variable, since taking it into account might shed light on some important properties of intrusive pronouns. At the same time, we realize that the number of both animate and inanimate stimuli were two times less than it would be required to represent it as the main variable, which is why the effect of animacy should be studied in more detail in the future.

In this work, in data analysis we used normalized z-scores. The results of Experiments 1 were processed using the ANOVA method, after which they were also processed using the Tukey pairwise comparison test.

3.1. Experimental results without animacy

3.1.1. Experiment 1 (Likert scale)

Analysis showed that the type of construction, presence of an intrusive pronoun and the combination of this factors turned out to be statistically significant.

Table 1. ANOVA test results for experiment 1

	Df	Sum sq	Mean sq	F value	P-value	Sign.
IslandType	2	49.7	49.66	146.93	$<2*10^{-16}$	***
Intrusive	1	111.5	55.77	165.02	$<2*10^{-16}$	***
IslandType : Intrusive	2	9.3	4.66	17.78	$<2*10^{-16}$	***
Residuals	2391	808.1	0.34			
Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1						

The Table 2 provides means for all conditions, as well as grammatical and non-grammatical fillers and the Figure 1 shows an interaction plot of z-scores of various conditions, as well as grammatical and non-grammatical fillers.

Table 2. Mean z-scores and standard deviation for various conditions according to the results of experiment 1

Island type	Intrusive pronoun	Mean z-score	sd
CNP	no	-0.548	0.528
CNP	yes	-0.707	0.416
čto	no	-0.121	0.694
čto	yes	-0.397	0.554
čtoby	no	0.100	0.710
čtoby	yes	-0.358	0.541
Ungrammatical fillers		-0.629	-0.685
Grammatical fillers		1.40	1.37

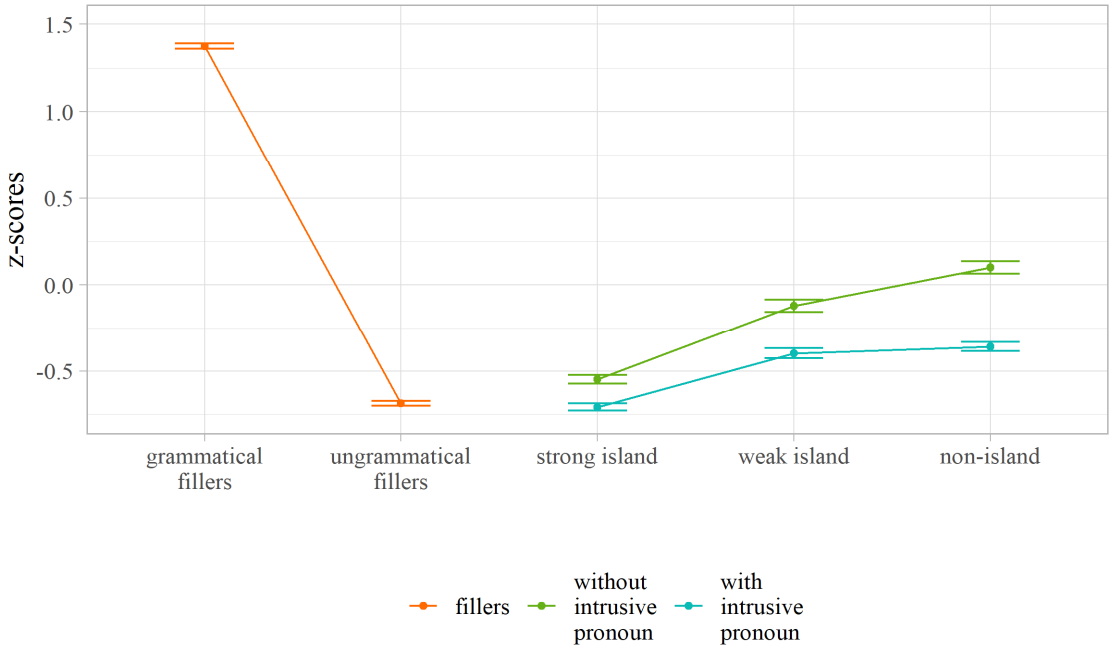

Figure 1. Comparison of z-scores of different conditions for the Likert scale

The results of pairwise comparison of conditions with and without intrusive pronouns for each island type can be seen in Table 3.

Table 3. The results of Tukey pairwise comparison test to the data of experiment 1

Island type (comparing conditions with and without intrusive pronouns)	p-value
Complex noun phrase	0.001
Relative clause with *čto* complemetizer	0.000
Relative clause with *čtoby* complemetizer	0.000

Thus, for all types of constructions the difference between sentences with and without intrusive pronouns turns out to be statistically significant — for all types of islands it is true that intrusive pronouns worsen judgments of acceptability (for an island of a complex noun phrase -0.548 *vs.* -0.707, p = 0.001, for constructions with the complementizer *čto* -0.121 *vs.* -0.397, and for constructions with the complementizer *čtoby* 0.1 *vs.* -0.358, p = 0 for both). At the same time, if the differences between sentences with an island of a complex noun phrase and an intrusive pronoun and non-grammatical fillers still turn out to be statistically insignificant (-0.707 *vs.* -0.685, p = 0.997), this is not the case for sentences without an intrusive pronoun in an island of a complex noun phrase (-0.548 *vs.* -0.685, p = 0.0002).

3.1.2. Experiment 2 (forced-choice)

Experiment 2 results also show that sentences without intrusive pronouns are preferred. This can be clearly seen in Figure 2, where the results of the experiment are considered without considering animacy, and was also confirmed using the sign test, the results of which can be seen in Table 4.

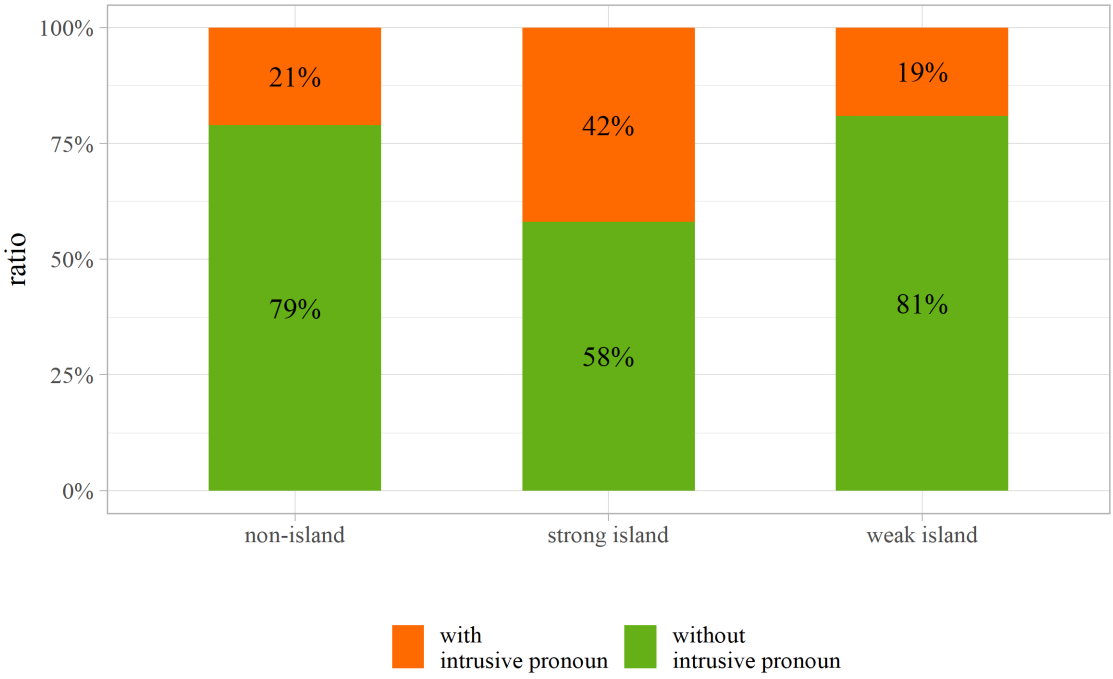

Figure 2. Results of the forced-choice experiment

Table 4. The results of applying the sign test to the data obtained using the forced-choice method

Island type	p-value
Complex noun phrase	0.0002
čto	$2.2*10^{-16}$
čtoby	$2.2*10^{-16}$

At the same time, the difference between constructions with relative clauses with *čto* and *čtoby* turns out to be statistically insignificant (χ-square = 0.342, df = 1, p-value = 0.559). All other differences between different types of islands appear to be significant (χ-square = 77.994, df = 1, p-value < $2.2*10^{-16}$).

3.2. Results of experiments with animacy

As mentioned above, analyzing the results we found that animacy significantly affects the results. For this reason, we decided to consider animacy as a factor, although we realize that when considering animacy as an independent variable, the number of observations will be less than desired. Nevertheless, in this section we present the results of both experiments with animacy as they seem to be of additional interest.

3.2.2. Experiment 1.2 (Likert scale)

The type of island, presence of an intrusive pronoun, animacy and the combinations of this factors were significant variables.

Table 5. ANOVA test results for experiment 1 (with animacy)

	Df	Sum sq	Mean sq	F value	Pr(>F)	Sign.
IslandType	2	40.8	20.387	62.977	$<2*10^{-16}$	***
Intrusive	1	19.0	18.981	58.633	$<2*10^{-16}$	***
Animacy	1	0.7	0.740	2.285	0.1308	
IslandType : Intrusive	2	9.7	4.872	15.050	$<2*10^{-16}$	***
IslandType : Animacy	2	1.3	0.628	1.940	0.1440	
Intrusive : Animacy	1	2.0	2.044	6.315	0.0121	*
IslandType : Intrusive : Animacy	2	0.7	0.347	1.071	0.3430	
Residuals	1817	588.2	0.324			
Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1						

The Table 6 provides means for all conditions, as well as grammatical and non-grammatical fillers and the Figure 3 shows a boxplot of z-scores of various conditions, as well as grammatical and non-grammatical fillers.

Table 6. Mean z-scores and standard deviation for various conditions according to the results of experiment 1 (with animacy)

Island type	Intrusive pronoun	Animacy	Mean z-score	sd
CNP	no	Inanimate	-0.530	0.381
CNP	no	Animate	-0.545	0.359
CNP	yes	Inanimate	-0.587	0.328
CNP	yes	Animate	-0.525	0.419
čto	no	Inanimate	-0.211	0.636
čto	no	Animate	-0.350	0.517
čto	yes	Inanimate	-0.476	0.442
čto	yes	Animate	-0.415	0.472
čtoby	no	Inanimate	-0.045	0.645
čtoby	no	Animate	-0.134	0.652
čtoby	yes	Inanimate	-0.373	0.515
čtoby	yes	Animate	-0.411	0.519
Ungrammatical fillers			-0.586	0.336
Grammatical fillers			1.10	0.520

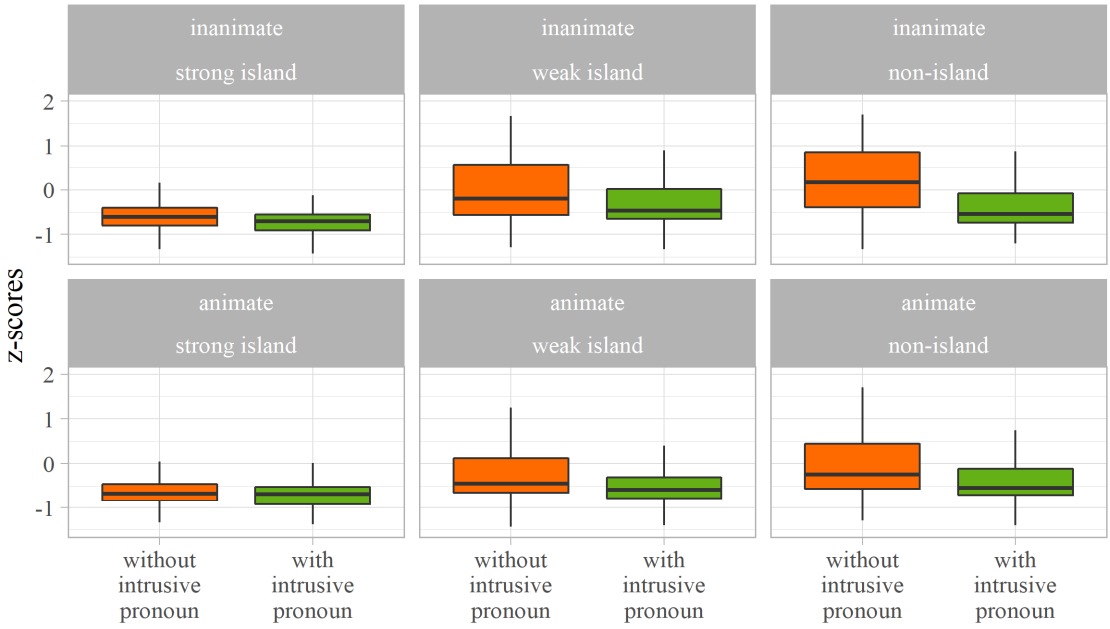

Figure 3. Comparison of z-scores of different conditions for the experiment 1 (with animacy)

For an island of a complex noun phrase, the difference between such sentences turned out to be insignificant that both of them have an intrusive pronoun or not, and the difference consists only in animacy (for sentences without an intrusive pronoun -0.522 *vs.* -0.579, $p = 0.997$, for sentences with an intrusive pronoun -0.708 *vs.* -0.706, $p = 1$). The difference between sentences without an intrusive pronoun and with an animated object and sentences with an

intrusive pronoun and with an inanimate object was also insignificant (-0.579 *vs*. -0.708, $p = 0.514$). In all other cases, the presence of an intrusive pronoun significantly worsened scores of sentences.

For the island of a relative clause with the *čto* complementizer the difference between sentences without an intrusive pronoun and with an animated object and sentences with an intrusive pronoun and with an inanimate object turned out to be insignificant (-0.238 *vs*. -0.281 at $p = 0.999$). In all other cases, the presence of an intrusive pronoun significantly worsened acceptability judgments.

For the construction with a relative clause with the complementizer *čtoby* the differences between sentences with an animate and inanimate object in the presence of an intrusive pronoun turned out to be insignificant (-0.339 *vs*. -0.378 with $p = 0.999$). In all other cases, the presence of an intrusive pronoun significantly lowers the acceptability judgments.

Moreover, if we separately analyze the data for animate and inanimate conditions, we get a similar picture — when considering inanimate conditions, we will see significant differences between sentences without intrusive pronouns and with them for all types of constructions (for a complex noun phrase: -0.522 *vs*. -0.708 at $p = 0.015$, for *čto*: 0.021 *vs*. -0.281 at $p = 0.0001$, for *čtoby*: 0.254 *vs*. -0.339 at $p = 0$). For conditions with an animated object, the differences for constructions with the complementizers *čto* and *čtoby* remain (-0.238 *vs*. -0.494 and -0.053 *vs*. -0.378, respectively, $p < 0.001$ in both cases), and for the island of a complex noun phrase, the differences between sentences with and without intrusive pronouns are insignificant (-0.706 *vs*. -0.579, $p = 0.194$).

3.2.3. Experiment 2

Let's now consider the results of Experiment 2 taking animacy into account. We applied the sign test to the results, which showed the statistically significant difference between the presence of the intrusive pronoun and its absence for all conditions. The results of applying sign test are presented in Table 7, on the Figure 4 the ratio of answers for various conditions is presented:

Table 7. Results of applying the sign test to data obtained using the forced-choice method

Island type, objects' animacy	p-value
CNP, inanimate	0.003
CNP, animate	0.022
čto, inanimate	$2.2*10^{-16}$
čto, animate	$2.2*10^{-16}$
čtoby, inanimate	$2.2*10^{-16}$
čtoby, animate	$2.2*10^{-16}$

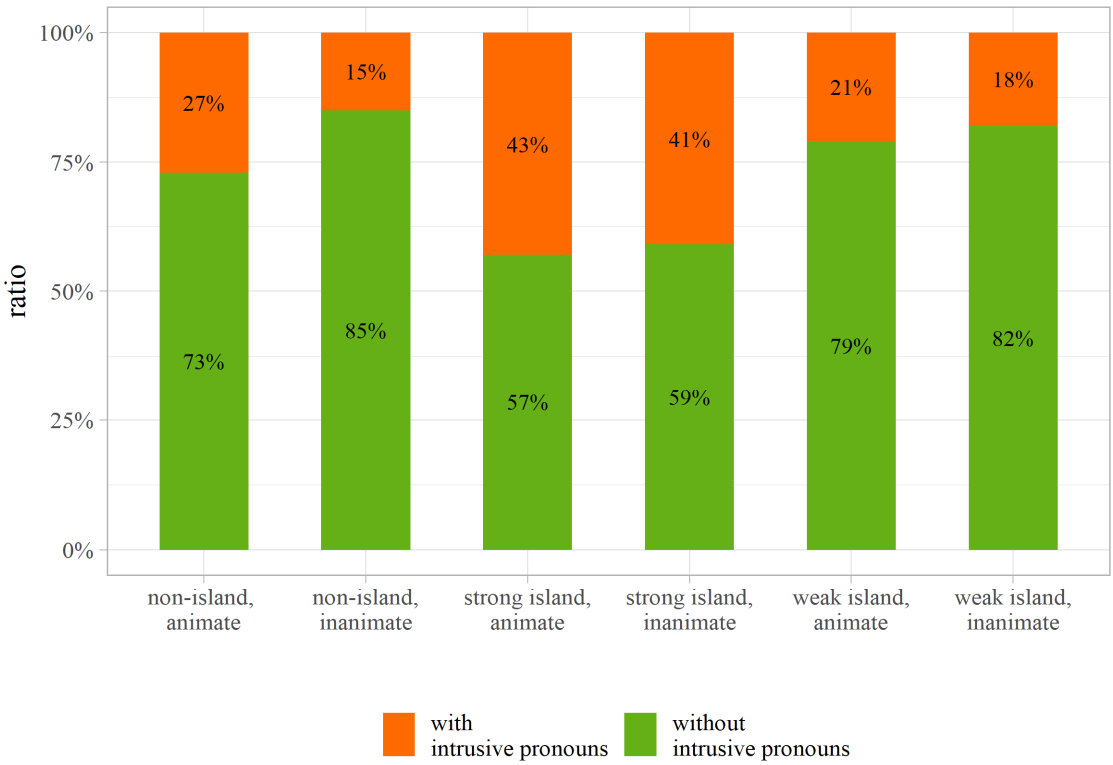

Figure 4. The results of an experiment 2 (with animacy)

For sentences with a relative clause with the complementizer *čtoby*, the difference between sentences with an animate and inanimate object turned out to be statistically significant (p-value = 0.0002). For the subordinate explanatory with *čto* complementizer and the island of a complex noun phrase, this difference was insignificant (p-value = 0.437 and p-value = 0.696, respectively).

At the same time, it is noteworthy that for fillers, where both variants were equally non-grammatical — the choice was given in them between an option with a full noun phrase or with a relative pronoun in place of a gap — a preference was found in favor of sentences with a noun phrase[5]. Note that the differences in the ratio of these two options turned out to be greater than the differences between sentences in which there was an extraction from a complex noun phrase.

[5] This raises many questions. What does it mean that sentences with a full noun phrase in place of a gap are more acceptable than sentences with a relative pronoun in the same position? Can we say that one of these types of sentences is more grammatical than the other? Or it should be analyzed in such a way that both constructs are non-grammatical, but one of them "sounds better", as is done in the work on intrusive pronouns [Beltrama, Xiang 2016]? This question remains open.

4. Discussion

In this section, we will compare and analyze the results of the experiments carried out.

For a more visual consideration of the results of these experiments, let us again consider the interaction plots for various types of structures with and without intrusive pronouns.

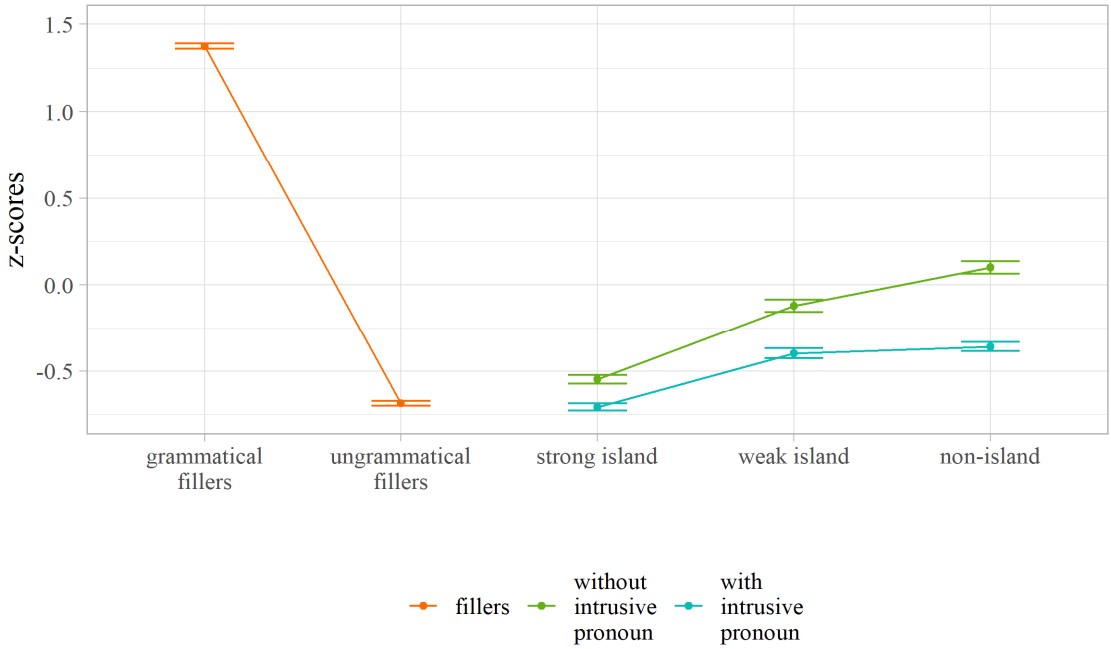

Figure 5. The results of the experiment without animacy

As can be clearly seen in the plots, sentences with intrusive pronouns receive lower scores for each type of structure, which suggests that the initial hypothesis that intrusive pronouns are able to “save”, “repair” or increase the acceptability of the island constructions from which the extraction occurred is incorrect. At the same time, the data obtained using the Likert scale are consistent with the data obtained using the forced-choice method — both methods detected the presence of a significant deterioration in the presence of an intrusive pronoun in the island of a complex noun phrase. This distinguishes Russian from English, Greek and German — according to data in [Alexopoulou, Keller 2007] in strong islands the differences between sentences with and without intrusive pronouns disappeared. Thus, we can assume the following reasons for this. Firstly, the Russian language may indeed be of a different “type” than the languages studied in the above-mentioned work — there is no language there, which would distinguish sentences with and without intrusive pronouns in all

types of construction. On the other hand, this may indicate that the methods used in previous studies have less statistical power than those used by us, which is why such a difference was not found. However, with the same success we can assert that we received a false positive result, but in this case, it was obtained using two different methods at once. Moreover, according to study [Sprouse, Almeida 2017] forced-choice method is actually more effective to discover phenomena of small effect, although magnitude estimation and Likert scale have almost the same statistical power. Finally, we can assume that the concept of "strong island" may be different for different languages and may not be completely equivalent. Moreover, we could assume the gradual nature of the island constraints, which would help explain the gradualness of the estimates obtained — as mentioned earlier, similar assumptions were used in [Alexopoulou, Keller 2007], which now, at least more understandable.

Let us now consider the interaction of the presence of an intrusive pronoun and animacy separately for each type of the construction.

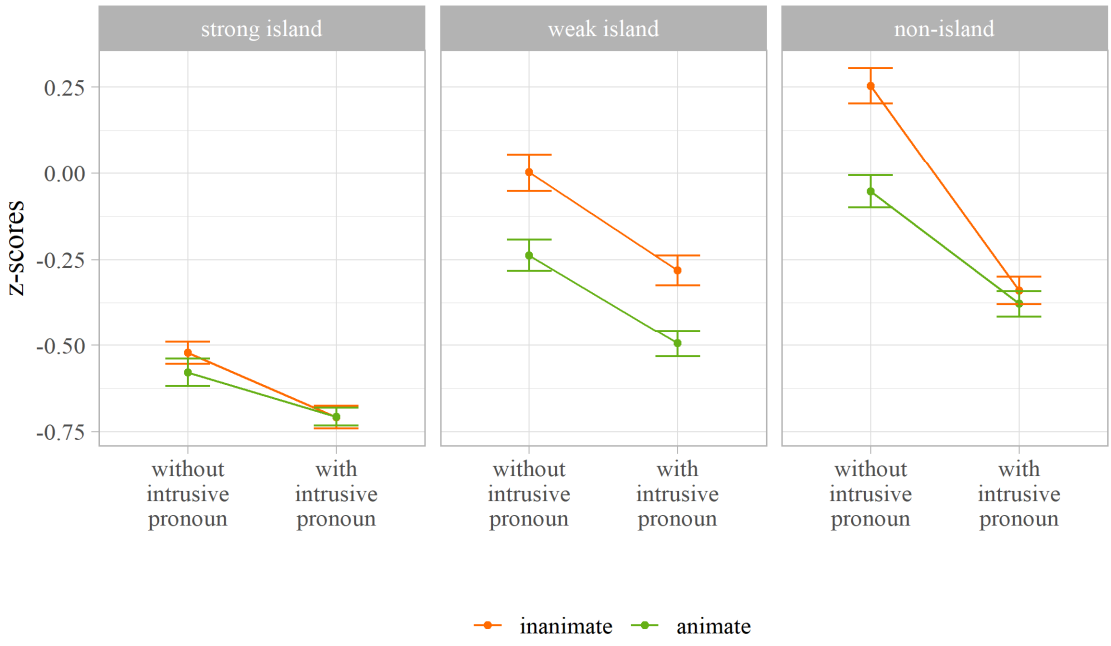

Figure 6. Interaction plot for all islands taking into account animacy of the object

Figure 6 shows the interaction plot for all island types. In center the island of relative clauses with the complementizer *čto* 'that' is presented. Both the presence of an intrusive pronoun and animacy lower the acceptability approximately equally, which leads to the absence of a statistically significant difference between sentences with an animate object, but without an intrusive pronoun and sentences with an inanimate object and intrusive pronoun. Each

factor equally lowers the scores relative to the “ideal” condition (an inanimate object + the absence of an intrusive pronoun), while their combination lowers the ratings by approximately the sum of their individual decreases.

On the right you can see an interaction plot for sentences with an extraction from relative clauses with *čtoby* complementizer. The picture on it differs from the *čto* complementizer only in that when there is an intrusive pronoun: the differences between sentences with an animate and inanimate object become statistically insignificant. Thus, we can assume that in the presence of an intrusive pronoun, the sentence becomes so unacceptable (which was expected for non-island structures) that animacy itself can no longer worsen or improve acceptability ratings. At the same time, if there is no intrusive pronoun, the extraction from this constriction is relatively acceptable (although its acceptability is much lower than that of acceptable fillers), which makes it possible to distinguish between sentences with an animate and inanimate object.

Plot on the left demonstrates the interaction of factors for an island of a complex noun phrase. For sentences with and without intrusive pronouns, the difference in animacy of the extracted object is insignificant. Thus, we can assume that the extraction from the island of a complex noun phrase is already ungrammatical (which is also confirmed by the statistical insignificance of the differences between sentences with an island of a complex noun phrase and ungrammatical fillers), which makes the differences between animate and inanimate objects appear insignificant, which resembles the situation for clauses with *čtoby* in the presence of an intrusive pronoun.

As can be seen in Figure 7, in the absence of an intrusive pronoun, the acceptability judgments change depending on the construction from which the extraction is made: for an island of a complex noun phrase — a strong island — the scores are the lowest, and there is also no difference between sentences with an animate and an inanimate object. This is followed by sentences in which the differences between animate and inanimate objects are statistically significant: sentences with *čto*, which is a supposedly weak island — sentences with *čtoby*, that are not supposed to be an island.

If the intrusive pronoun is present, in addition to the general lowering of the scores, we also observe the loss of distinction between the conditions with an animate and inanimate object for sentences with *čtoby*.

Thus, in addition to the fact that intrusive pronouns obviously do not increase the acceptability of sentences with or without island violations, the results of the Likert scale experiment may also indicate the relationship between

the possibility of extraction from a certain structure and the ability to identify statistically significant differences between the extraction of an animate and inanimate object. The main effect of animacy, consequently, is the absence of distinction between sentences with an animate and inanimate object, but without an intrusive pronoun, and sentences with an inanimate object and intrusive pronoun, which is observed for all three constructions from which the object was extracted. So, we can see this as the equal influence of animacy and intrusive pronouns on acceptability ratings. Moreover, if the presence of an intrusive pronoun always significantly worsens the acceptability judgments, animacy worsens them only when the construction is relatively acceptable.

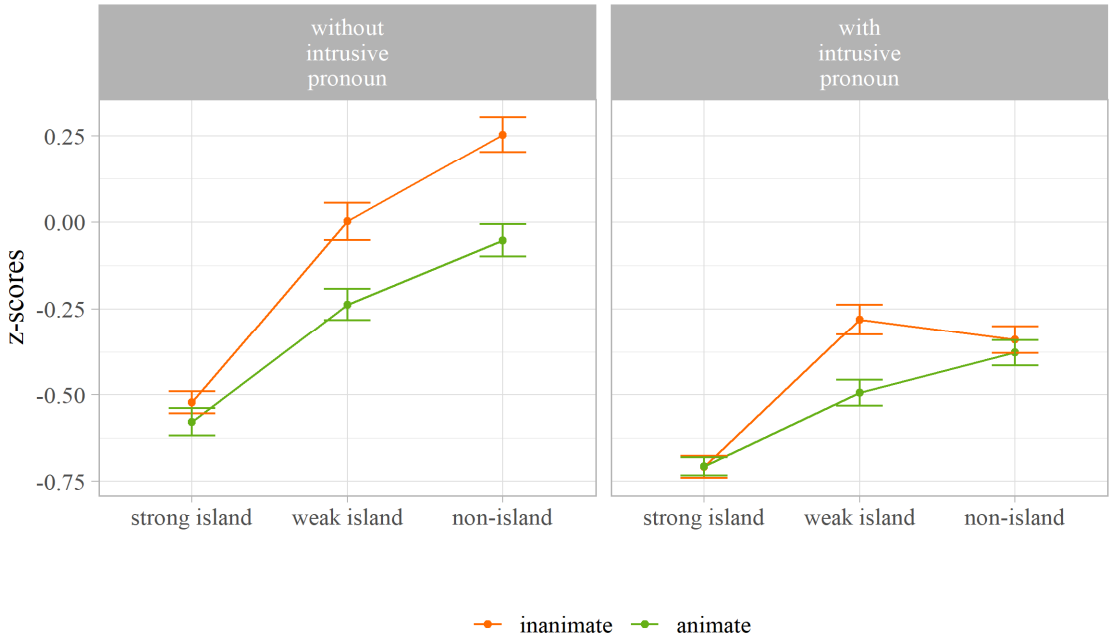

Figure 7. Sentences with and without intrusive pronouns

This can lead us to the same understanding of “island strength” as it is in [Alexopoulou, Keller 2007] — more as a gradual concept than a discrete one. Discrete definition of weak and strong islands has been developed by many different authors since the appearance of this term (e.g. [Ross 1967], [Cinque 1990], [Pesetsky 1987], [Rizzi 1990], [Lyutikova, Gerasimova 2021]). According to this definition weak islands are transparent only for some constituents, but not to others, while strong islands prohibit all extractions. At the same time, recent research shows that weak islands do not truly allow extraction of “allowed” constituents — its acceptability is not maximal, but intermediate (e.g. [Kush et al. 2017; Sprouse et al. 2016], see also [Atkinson et al. 2016; Villata et al. 2016]).

This goes in line with the graduality of the acceptability judgments. The first urge is to postulate the graduality of grammar itself. We won't be alone in it. With the development of experimental methods and methods of statistical analysis, *gradient grammar theories* are developing fast nowadays. Some of them account only for grammatical constraints, e.g., *linear optimality theory*, presented in [Keller 2009]. Others consider also cognitive load, for example *self-organized sentence processing grammar derived model* or SOSP-GD (see the most recent work on islands in this framework [Vilata, Tabor in press]). Finally, some studies exclude grammar and reduce gradience in acceptability to the difference of processing of different constructions (e.g., [Deane 1991; Hofmesiter, Sag 2010]).

Although our results may not fully speak in favor of any of these theories, it can be evidence that island constraints are really more gradual, than discrete phenomena. Otherwise, from the traditional point of view we should have said that *čto* construction is "peninsula" — it is somehow better than CNP and worse than *čtoby* construction regarding the object extraction. Without any statements pro or contra any of different approaches (since it lies outside the scope of our work) we will just note this graduality as another one fact to consider regarding the nature of island constraints.

Thus, the use of various experimental methods shows the same results: the presence of intrusive pronouns in island structures not only shows no evidence of "repairment" or amelioration of an illicit island extraction, but also makes the sentences less acceptable. This is true for the data obtained using all methods.

At the same time, when using a Likert scale for all the structures studied, an effect of animacy on the acceptability was found — sentences where an inanimate object was extracted, on average, were rated higher than sentences with an animate object. It is noteworthy that the ability to detect statistically significant differences between sentences with an animate and inanimate object correlates with the predicted acceptability of conditions. Thus, for sentences with the object extraction from a relative clause with a *čtoby* 'so that' we could expect that intrusive pronouns should definitely worsen acceptability, since this structure is not island and, as a result, does not need "repair". Despite the fact that the presence of an intrusive pronoun worsened the acceptability judgments in all structures, in sentences with *čtoby* the presence of an intrusive pronoun made it impossible to distinguish between sentences with an animate and inanimate object (although the scores of these conditions turned out to be significantly higher than in non-grammatical fillers). Interestingly, this also correlates with the results of Experiment 2, which revealed differences in animacy only for constructs with *čto* 'that'.

At the same time, the object extraction from the island of a complex noun phrase, which is deliberately unacceptable, did not allow us to reveal differences in the scores of the extraction of an animate and inanimate object both in the presence of an intrusive pronoun and in its absence (formally, these conditions were judged significantly worse than conditions without an intrusive pronouns, but in fact both are unacceptable as they are statistically indistinguishable from non-grammatical fillers). Thus, for unacceptable sentences, it again turns out to be impossible to reveal the differences in judgments for animate and inanimate objects.

As for sentences with *čto*, in respect of which there is no unequivocal opinion as to whether they are island structures, then, apparently, if we consider it a weak island in the same sense as [Alexopoulou, Keller 2007], then we get the whole picture. In this case, for strong islands it is impossible to find a statistically significant difference between sentences with the extraction of an animate and inanimate object, for weak islands this difference is available both in the presence of an intrusive pronoun and in its absence (apparently, its presence lowers the ratings not strongly enough), in the case, if the structure is not an island, this distinction is found when the intrusive pronoun is absent, and not when the intrusive pronoun is present. This can be summarized in Table 8.

Table 8. The ability to detect the difference between the scores of stimuli with the extraction of an animate and inanimate object in different island structures in the presence/absence of an intrusive pronoun

	Weak island	Strong island	Non-island
With intrusive pronoun	—	+	+
Without intrusive pronoun	—	+	—

Of course, the data obtained can show this dependence of the possibility of statistically significant differentiation for the extracted objects' animacy on the type of structure and for some other reason — after all, initially, animacy was only an interfering variable and the lack of stimulus material could play a cruel joke with us. In this regard, it seems important to conduct similar studies for other structures, for which we already have assumptions, whether they are strong islands, weak islands, or non-islands, in order to investigate whether this correlation really depends on the type of island structure. If this correlation is observed there, too, we will get a fairly convenient tool for determining the type of structure. Non-declinable complementizers, which are expected to be more acceptable, than declinable ones, are also to check in the future. Another

promising direction seems to be conducting similar experiments with audio stimuli, due to the fact that the construction with intrusive pronouns is more characteristic of colloquial speech. It also seems important to check the influence of the embedding depth of the structure from which the extension occurs. This, however, like other aspects and cases of the use of intrusive pronouns, requires further research, the beginning of which was laid by this work.

5. Conclusion

In this pilot experimental study of intrusive pronouns, we set a goal to check whether they ameliorate the island violations or not. We conducted two experiments, using Likert scale and forced-choice methods. Considering strong, weak and non-island constructions, our data shows that intrusive pronouns lower acceptability of sentences in all conditions. However, if we consider animacy as a main factor, we can use acceptability patterns as an indicator of construction type, although it is to check in full-scale research.

Abbreviations

ACC — accusative case; GEN — genitive case; INS — instrumental case; LOC — locative case; PL — plural.

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Локус абсолютива в структуре неглагольных предикатов в языке кекчи*

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В данной статье рассматривается проблема лицензирования абсолютива в неглагольных предикатах в языке кекчи. Освещается вариативность позиции абсолютивного показателя относительно основы в глагольных и неглагольных предикатах в кекчи. Предлагается попытка анализа подобной вариативности с точки зрения морфосинтаксических операций, вызываемых Infl и *v* в структуре неглагольных предикатов.

Ключевые слова: майянские языки, кекчи, неглагольные предикаты, лицензирование абсолютива.

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THE LOCUS OF ABSOLUTIVE IN THE STRUCTURE OF NON-VERBAL PREDICATES IN THE Q'EQCHI' LANGUAGE*

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The article discusses the problem of the absolutive licensing in non-verbal predicates in the Q'eqchi' language. The article highlights the variability of the position of the absolutive marker in relation to the stem in verbal and non-verbal predicates in Q'eqchi'. An attempt to analyze such variability is proposed from the point of view of morphosyntactic operations caused by Infl and *v* in the structure of non-verbal predicates.

Keywords: Mayan languages, Q'eqchi', non-verbal predicates, absolutive licensing.

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1. Введение

Генетически язык кекчи входит в кичеанскую группу майянских языков. Распространён преимущественно в Гватемале (департаменты Альта Верапас, Баха Верапас, Киче, Исабаль, Петен), а также в Белизе (регион г. Толедо). Это эргативный язык с вершинным типом маркирования. Личное маркирование осуществляется с помощью двух серий маркеров: эргативные маркеры, для которых в майянской лингвистике принято название «серия А», и абсолютивные — серия В. Маркеры серии А выражают грамматические значения субъекта переходного действия и посессива. Маркеры серии В — значения непереходного субъекта и переходного объекта (1). Так, в примере (1) мы видим, что синтаксические отношения кодируются аффиксами в структуре предиката *xinxtiw*: морфема эргатива *-x* кодирует агенс (*aj tz'ul* 'муравей') при этом полная именная группа *aj tz'ul* не получает морфологического маркирования; морфема абсолютива *-in* кодирует объект переходного действия (меня). Так как кекчи — это pro-drop-язык, полное местоимение не является необходимым.

(1) *x-in-x-tiw* *jun* *aj* *tz'ul.*
COMPL-1SG.ABS-3SG.ERG-колоть ART CLF муравей
'Меня укусил муравей.' (кекчи [ALMG 2004: 182])

В работах [Bricker 1977] и [Coon et al. 2014] отмечается представляющая интерес вариативность положения абсолютивных показателей в структуре предиката в майянских языках. Авторы делят майянские языки на две группы: языки с «высоким» абсолютивом ('HIGH-ABS') и «низким» ('LOW-ABS'). В языках с «высоким» абсолютивом в случае переходных глаголов абсолютивный маркер следует сразу же за маркером аспекта и предшествует эргативному маркеру. В случае же непереходных глаголов абсолютивный маркер располагается непосредственно слева от корня. В языках с «низким» абсолютивом абсолютивный маркер появляется в финальной позиции, то есть следует после основы глагола [Coon et al. 2014: 191] (таблица 1).

Таблица 1. Позиция абсолютива в майянских языках [Coon et al. 2014: 12]

HIGH-ABS	ASP	ABS	ERG	ROOT	SUFFIX	
LOW-ABS	ASP		ERG	ROOT	SUFFIX	ABS

Говоря о майянском абсолютивном параметре (таблица 1), необходимо также рассмотреть вызывающую интерес связь между позицией абсолютивного экспонента и лицензирующей его вершиной. Впервые эта связь была выявлена в работе [Tada 1993]. Автор рассуждает о фокусных антипассивных конструкциях в майянских языках и замечает следующую зависимость. В языках, в которых отмечается параметр [+FOCUS ANTIPASSIVE], то есть наличие специальных конструкций, позволяющих извлекать эргативный аргумент, маркер абсолютива находится, в основном, в так называемом «высоком» положении, то есть справа от аспектуального показателя и слева от эргативного показателя, либо в случае непереходных глаголов — от корня. Примером такого языка может служить интересующий нас кекчи (2). В то время как в языках с параметром [-FOCUS ANTIPASSIVE], то есть без упомянутой асимметрии извлечения эргативного аргумента, абсолютив располагается в крайнем правом, «низком» положении.

(2) *li* *cheek'el* *winq* *x-∅-tenq'a-nk*
ART старый мужчина COMPL-3SG.ABS-помогать-AP

r-e *li* *ch'ajom.*
3SG.ERG-RN ART мальчик
'Именно старик помог мальчику.' (кекчи [ALMG 2004: 118])

Так, в (2) мы видим, что для извлечения агенса переходный глагол помогать *tenq'a* становится непереходным посредством антипассивизации с помощью суффикса антипассива *-nk*.

В [Coon et al. 2014: 17] приводится интерпретация майянского абсолютивного параметра и обобщения [Tada 1993] и постулируется зависимость позиции абсолютивного экспонента от лицензирующей его вершины. Так, из таблицы 2 видно, что «высокий» абсолютив лицензируется высокой функциональной вершиной Infl°, в то время как «низкий» — вершиной *v*°.

Таблица 2. Майянский абсолютивный параметр и лицензирование абсолютива [Coon et al. 2014: 17]

HIGH-ABS	ABS assigned by Infl°
LOW-ABS	ABS assigned within *v*P

В [Legate 2008] предлагается различение двух абсолютивов: ABS = NOM и ABS = DEF. Таким образом, ABS = NOM (рисунок 1) отмечается в HIGH-ABS-языках, а ABS = DEF (рисунок 2) — в LOW-ABS-языках.

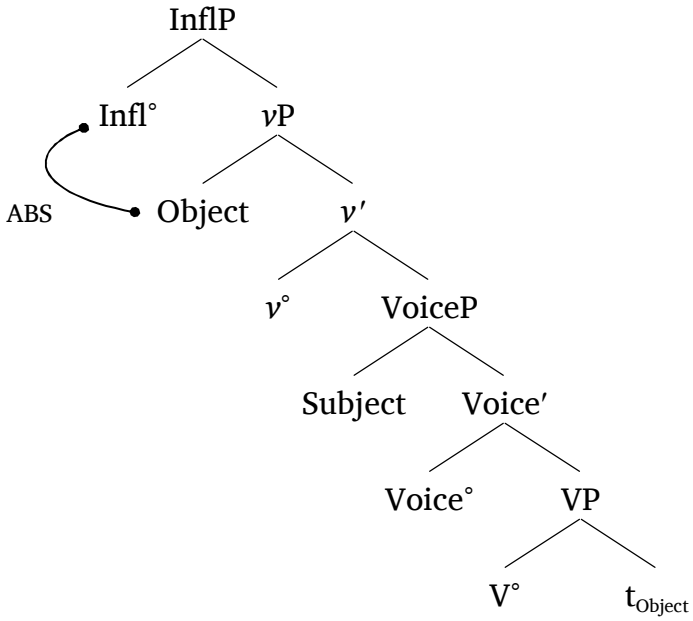


Рисунок 1. ABS = NOM

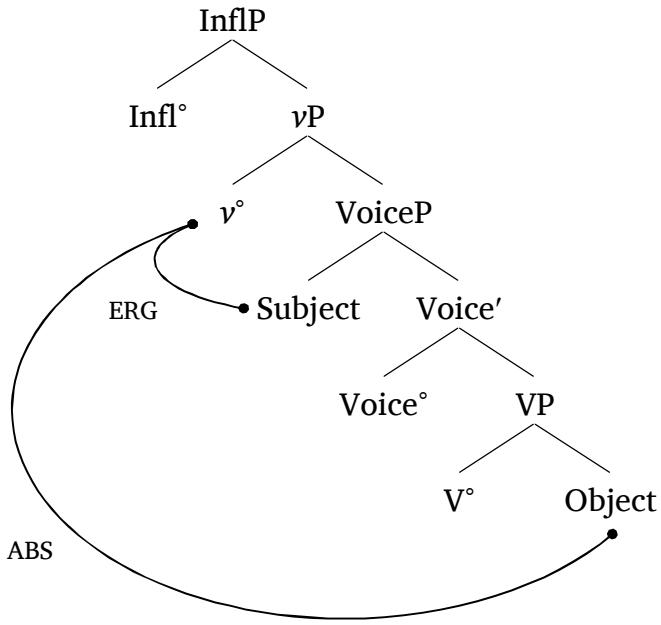


Рисунок 2. ABS = DEF

В HIGH-ABS-языках (рисунок 1) падеж, реализуемый как абсолютив, приписывается вершиной Infl, то есть, по сути, является абстрактным номинативом. В то же время в LOW-ABS-языках после ингерентного приписывания эргатива вершиной *v* абсолютив приписывается структурно в силу своей синтаксической позиции. То есть единственная ИГ в области, не получившая падеж, получает дефолтный падеж [Marantz 1991]. Этот дефолтный

падеж реализуется как абсолютив. Таким образом, реализация абстрактного абсолютива не одинакова для HIGH-ABS и LOW-ABS-языков.

По нашему наблюдению, все кичеанские языки относятся к группе с «высоким» абсолютивом. Так, например, в примере (3) (кекчи) мы видим, что абсолютивный маркер следует сразу же за маркером комлетива, предшествуя эргативному маркеру, за которым уже следует глагольная основа.

(3) *x-**in**-aa-sik'*.
COMPL-**1SG.ABS**-2SG.ERG-искать
'Ты искал/-а меня.' (кекчи [ALMG 2004: 104])

В большинстве кичеанских языков (HIGH-ABS) абсолютив появляется слева от лексического корня также и в случае неглагольных предикатов (4).

(4) ***in*** *yowab'*.
1SG.ABS больной
'Я болен.' (киче [Suy Tum 1988: 76])

Так, (4) демонстрирует, что в языке киче абсолютив появляется в левой позиции. Важно отметить, что связанные и свободные (независимые личные местоимения) маркеры абсолютива в киче не отличаются (по крайней мере, фонологически), а также, согласно орфографии, принятой Академией майянских языков Гватемалы, в языке киче на письме абсолютивный маркер, употреблённый с глагольным предикатом, пишется внутри словоформы, в то время как абсолютивный маркер, употреблённый с неглагольным предикатом, пишется отдельно от последнего. Вследствие отсутствия копулы, специальных временных показателей, а также неаккузативного характера аргумента неглагольных предикатов мы вслед за [Coon 2013] считаем майянские языки омнипредикативными. В омнипредикативном языке наблюдаются морфологические отличия между лексическими классами, однако не наблюдается синтаксических отличий между глаголом и неглаголом. То есть, с синтаксической точки зрения, в омнипредикативном языке V = Pred. В кичеанских языках выделяется базовый порядок слов: VOS. Таким образом, базовый порядок слов с неглагольным предикатом: Pred-O-S. При этом O и S в описании базового порядка слов — полные именные группы. *Yowab'* (больной) в (4) представляет собой неглагольный предикат. *In* (1SG.ABS) в (4) располагается слева от неглагольного предиката. Конструкция **yowab' in* была бы неграмматичной [Suy Tum 1988].

Таким образом, мы считаем *in* в (4) абсолютивным маркером, а не полным местоимением. Поэтому представляется уместным, и более того, необходимым, проводить дальнейшее сравнение (4) и (7). В целом же, как представляется, данный вопрос является предметом отдельной обстоятельной работы.

При этом следует отметить также, что кекчи является омнипредикативным языком [Launey 1994] (как и все майянские [Coon 2013]), то есть таким, в котором все основные части речи могут выступать предикатами без необходимости морфологических дериваций и без изменения их значения. Поэтому мы предполагаем, что лексическая вершина, независимо от того, какой характер она имеет (глагольный или неглагольный), располагается в одной и той же позиции.

Структура финитной переходной (5) и непереходной (6) клаузы в кекчи помещает маркер абсолютива слева от основы.

(5) *x-**at**-qa-sik'* *chaq* *sa'* *k'ayiil*
COML-**2SG.ABS**-1PL.ERG-искать PROG PRE рынок

ab'an *ink'a'* *x-**at**-qa-taw.*
но NEG COML-**2SG.ABS**-1PL.ERG-находить
'Мы искали тебя на рынке, но не нашли.' (кекчи [ALMG 2004: 166])

(6) *hulaj* *t-**oo**-chal-q* *laa'o.*
завтра POT-**2PL.ABS**-приходить-SS мы
'Мы придём завтра.' (кекчи [ALMG 2004: 337])

Однако в случае неглагольных предикатов (NVPs, non-verbal predicates) в языке кекчи морфема абсолютива следует за основой вместо ожидаемого положения слева от неё (7).

(7) *aj* *k'aleb'aal-**in*** *laa'in.*
CLF крестьянин-**1SG.ABS** я
'Я крестьянин.' (кекчи [ALMG 2004: 19])

Таким образом, цель данной работы — попытка объяснить подобного рода вариативность положения показателя абсолютива в языке кекчи.

В разделе 2 представлена структура неглагольной предикации в языке кекчи. Раздел 3 содержит информацию об основных морфосинтаксических операциях в структуре неглагольных предикатов в языке кечи. В разделе 4 подводятся краткие итоги исследования.

2. Архитектура неглагольной предикации в языке кекчи

Подраздел 2.1 содержит аргументы в пользу выделения суффикса статуса во всех типах неглагольных предикатов в языке кекчи, аргументирует постулирование наличия *v* в структуре неглагольных предикатов, а также демонстрирует, что локусом абсолютива в неглагольных предикатах является *v*. Подраздел 2.2 демонстрирует архитектуру неглагольной предикации в языке кекчи.

2.1. Суффикс статуса

Мы предполагаем, что в отличие от неглагольных предикатов в других майянских языках, неглагольные предикаты в кекчи имеют суффикс статуса, который может помочь объяснить финальную позицию абсолютива.

В общем случае категория статуса в майяских языках находится в сложных иерархических отношениях, во-первых, с категориями времени/аспекта/модальности, во-вторых, с переходностью предиката, в-третьих, с фонологическими характеристиками предикативного корня, в-четвёртых, с правой фонологической границей клаузы [Pye 1991].

Вслед за [Aissen 1992; Coon 2013; Coon et al. 2014; Mateo Pedro 2015] хостом граммем категории статуса мы полагаем *v*°.

В языке кекчи выделяется два суффикса категории статуса: *-k* (глухой смычный велярный) (для выражения так называемого «не-будущего времени») и *-q* (глухой смычный увулярный) (для выражения «будущего времени») [Stewart 2016: 59; Tzoc, Alvarez 2004: 92]. Само наличие суффикса категории статуса в языке кекчи указывает на непереходность предиката. В глагольной непереходной предикации суффикс *-k* употребляется, как правило, вместе с аспектуальными показателями комплетива и инкомплетива (8). В то время как суффикс *-q* — с показателями потенциалиса (футурума в терминологии [Robertson 1992]) и оптатива (9).

(8) ***nak****-in-loq'o-****k****.*
INC-1SG.ABS-покупать-SS
'Я покупаю.' (кекчи [Tzoc, Alvarez 2004: 93])

(9) ***ch****-e'-war-****q***
OPT-3PL.ABS-спать-SS
'чтобы они уснули' (кекчи [Tzoc 2004: 60])

Таким образом, *-k* употребляется в случае, если семантика предикации не включает значения из зоны модальности, в то время как *-q* употребляется для выражения модальных значений.

Наше предположение состоит в том, что все неглагольные предикаты в языке кекчи имеют суффикс статуса.

Из работ [Caz Cho 2007] и [Stewart 2016] известно, что позиционные неглагольные предикаты, а также неглагольные предикаты с фонологической формулой $C^1VC\text{-}C^1o/u$ обладают суффиксами статуса (10).

(10) *chunchuu-**k**-in.*
сидящий-**ss**-1SG.ABS
‘Я сижу.’ (кекчи [Stewart 2016: 118])

Более того, можно наблюдать некоторое подобие парадигмы спряжения неглагольных предикатов, из чего можно сделать вывод о существовании также нулевого суффикса статуса (11a).

(11) a. *ch’iilambil-∅-at.*
наказан-**ss**-2SG.ABS
‘Ты наказан.’ (кекчи [Stewart 2016: 118])

b. *ch’iilambil-**aq**-at.*
наказан-**ss**-2SG.ABS
‘Ты будешь наказан.’ (кекчи [Stewart 2016: 118])

В (11b) справа от корня и слева от показателя абсолютива возникает позиция для суффикса статуса. По нашему мнению, справедливо предположить наличие такой же позиции и в (11a), которую занимает, как мы полагаем, фонологический ноль. Таким образом, в языке кекчи мы выделяем три суффикса статуса: *-k*, *-q* и *-∅*. Нулевой суффикс статуса, по нашему мнению, возникает во всех неглагольных предикатах, семантика которых не включает значения из зоны модальности (12a), исключая позиционные предикаты, в которых в этом случае суффикс статуса обретает фонологическую форму *-k* (13). Суффикс статуса *-q* в структуре неглагольного предиката так же, как и в случае с глагольными предикатами, указывает на модальность (11b, 12b).

(12) a. *yaj-∅-in* *ewer.*
больной-**ss**-1SG.ABS вчера
‘Вчера я был болен.’ (кекчи [Stewart 2016: 120])

b. *yaj-**aq**-in.*
больной-**SS**-1SG.ABS
‘Возможно, я болен.’ (кекчи [Stewart 2016: 120])

(13) *yoo-**k**-in chi se’ek.*
PR-**SS**-1SG.ABS PRE смеяться
‘Я смеюсь.’ (кекчи [ALMG 2004: 100])

Так как мы постулируем наличие суффикса статуса во всех типах неглагольных предикатов в языке кекчи, то мы постулируем в их структуре также и *v*.

В [Coon 2010: 63] приводится обобщение для вершины *v* в майянских языках с низким абсолютивом (14).

(14) Все внутренние аргументы должны получать абсолютив от вершины *v*.
Все вершины *v* должны назначать абсолютив внутреннему аргументу[1].

Мы предлагаем рассматривать глагольные предикаты в кекчи как HIGH-ABS, а неглагольные — как LOW-ABS на основании обобщения [Tada 1993] о зависимости позиции абсолютивного показателя от приписывающей абсолютив вершины. Поэтому считаем возможным распространить (14) также на неглагольные предикаты в кекчи, так как постулируем в их структуре слой *v*P. Аргумент неглагольных предикатов в языке кекчи, по нашему мнению, получает абсолютив от вершины *v*.

Таким образом, *v* неглагольных предикатов обладает неинтерпретируемыми *φ*-признаками ([*φ*:_]) и является зондом, разыскивающим интерпретируемые *φ*-признаки ([*φ*:*x*]) (15).

(15) [… $_{v\text{P}}$[*v*[*φ*:_] … [… ARG[*φ*:*x*]]]]

2.2. Архитектура неглагольной предикации

Неглагольные предикаты в языке кекчи лишены аспектуальных показателей, ср. (16a) и (16b).

[1] “All internal arguments must be assigned (absolutive) Case by a *v* head; All *v*’s must assign absolutive Case to an internal argument” [Coon 2010: 63].

(16) a. *b'ak'b'oo-k-in.*
связанный-SS-1SG.ABS
'Я связан.' (кекчи [Stewart 2016: 123])

b. ***k**-in-yaj-er.*
COMPL-1SG.ABS-больной-DER
'Я заболел.' (кекчи [Stewart 2016: 123])

Так, в (16b) представлен интранзитивный глагол *yajer*, образованный с помощью деривационного суффикса *-er* от неглагольного корня *yaj-*. Глагольный комплекс *yaj-er* обладает аспектуальным показателем комплетива *k-* в отличие от неглагольного комплекса *b'ak'b'ookin*, не обладающего аспектуальным показателем (16a).

Язык кекчи обладает асимметрией извлечения эргативного субъекта (синтаксической эргативностью). То есть, в активном залоге внешний аргумент не может быть A′-извлечён, вместо этого необходим антипассив (17b).

(17) a. *ani x-∅-x-sak'?*
WH COMPL-3SG.ABS-3SG.ERG-ударить
'Кого он ударил?' (*'Кто его ударил?') (кекчи [Stewart 2016: 75])

b. *ani x-∅-sak'-**o**-k r-e?*
WH COMPL-3SG.ABS-ударить-**AP**-SS 3SG.ERG-RN
'Кто его ударил?' (кекчи [Stewart 2016: 75])

В (17a) в фокус выносится объект. Для вынесения субъекта необходима особая синтаксическая конструкция антипассива. В (17b) семантически переходный глагол *sak'* (ударить) трансформируется в морфологически непереходный комплекс *sak'-o-k* при помощи аффикса антипассива *-o* и суффикса статуса *-k*.

В [Deal 2016] указывается, что в синтаксически эргативных языках абсолютив не наблюдается в нефинитных клаузах (18b).

(18) a. *t-**in**-xik chi war-k.*
POT-**1SG.ABS**-идти PRE спать-NMLZ
'Я пойду спать.' (кекчи [Vinogradov 2019: 248])

b. *xik w-e chi war-k.*
идти 1SG.ERG-RN PRE спать-NMLZ
'Я иду спать.' Досл.: 'Мне идти спать.'
(кекчи [Vinogradov 2019: 248])

Так, в (18a) представлена финитная клауза с показателем абсолютива в структуре предиката. В то время как в (18b) — нефинитная клауза без абсолютивного показателя.

Как указывалось выше, язык кекчи — омнипредикативный язык. Отличие глагольных предикатов от неглагольных заключается в способности присоединять аспектуальные маркеры: глагольные предикаты могут иметь аспектуальный показатель (16b), в то время как неглагольные не могут иметь аспектуальный показатель (16a). Поэтому критерием финитности для неглагольных предикатов является наличие абсолютивного показателя.

Вслед за [Bowers 1993] и [Baker 2003] мы предполагаем наличие предикативной вершины Pred, способной принимать аргумент в качестве комплемента. Суффиксы статуса в неглагольных предикатах создают стативный предикат в отличие от динамического предиката, создаваемого глагольными суффиксами статуса. Как указывалось выше, язык кекчи, как и все майянские языки, не обладает копулой [Coon 2013]. Поэтому неглагольные предикаты в кекчи не нуждаются в операции соединения (merge) Pred° и корня для образования Pred′. Таким образом, лексический корень непосредственно создаёт вершину Pred°, а не находится в позиции её комплемента. Комплементом Pred° является показатель абсолютивного согласования. Получаемая таким образом PredP вместе с *v* формируют слой *v*P. Последний, в свою очередь, вместе с Infl° входит в InflP. Вслед за [Armstrong 2017] мы считаем такую Infl нединамической — Infl[-dyn] (20).

Базовый порядок слов в кекчи (как и во всех кичеанских языках) для неглагольных предикаций такой же, как и для глагольных: NVP-O-S (19). Так, в (19) первую слева позицию занимает неглагольный предикат «богатый», затем следует ИГ с именем собственным и классификатором.

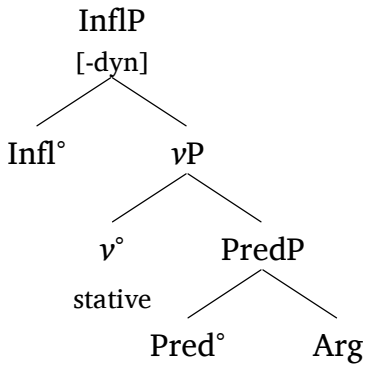
(19) *b’ihom-∅* *laj* *Kux.*
богатый-3SG.ABS CLF Куш
‘Куш богатый.’ (кекчи [ALMG 2004: 220])

Согласно [Aissen 1996: 451], в майянских языках спецификатор функциональной категории предшествует своей вершине, а спецификатор лексической категории следует за своей вершиной[2]. Поэтому вслед за [Aissen

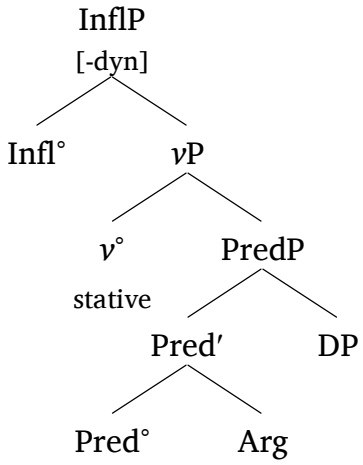
[2] “Hence, the specifier of a functional category precedes its head. The subject, on the other hand, follows V, suggesting that the specifier of a lexical category follows its head” [Aissen 1996: 451].

1996] мы располагаем спецификаторы лексических категорий справа, а спецификаторы функциональных категорий — слева. Как указывалось выше, кекчи — это pro-drop-язык с вершинным типом маркирования. Поэтому аргументы выражены морфемами в структуре предиката. В случае, когда аргумент дополнительно выражен полной DP, последняя проецируется справа (21).

(20)



(21)



3. Локус абсолютива в структуре неглагольных предикатов в кекчи

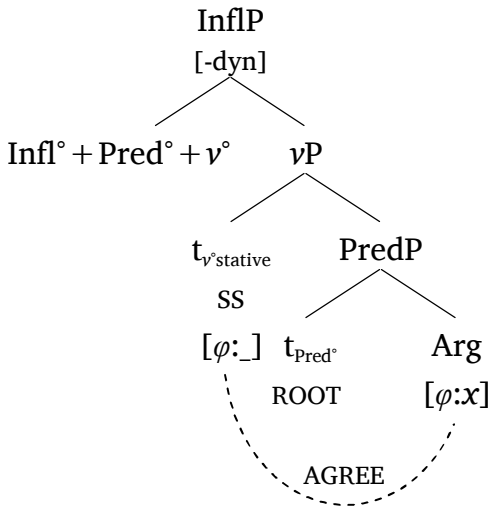
Подраздел 3.1 описывает свойства основных функциональных вершин, а также операции согласования и передвижения в структуре неглагольных предикатов. В подразделе 3.2 продемонстрированы морфосинтаксические операции, происходящие внутри InflP неглагольных предикатов в языке кечи.

3.1. Согласование и передвижение

Таким образом, неглагольные предикаты в кекчи представляют собой малую клаузу.

Как указывалось в 2.1, аргумент неглагольных предикатов получает абсолютив от вершины *v*. Таким образом, по нашему мнению, имеет место передвижение вершин Pred-to-*v*-to-Infl (22) подобно передвижению в глагольных предикатах (V-to-*v*-to-Infl). Так, в (22) предикативная вершина, создаваемая корнем, поднимается на первой стадии к более высокой функциональной вершине *v*. Затем достигает позиции высокой функциональной вершины Infl.

(22)



3.2. Морфосинтаксические операции внутри InflP в структуре NVPs

Таким образом, мы предполагаем нулевую Infl в неглагольных предикатах в языке кекчи, которая выбирает суффикс статуса в *v*P, а также обладает EPP-признаком. Также в неглагольных предикатах в кекчи мы постулируем вершину *v*, которая обладает неинтерпретируемым *φ*-признаком и старается устранить последний, разыскивая интерпретируемый *φ*-признак в области с-командования.

Процедурно для неглагольных предикатов мы выделяем три шага:

1. Базовая конфигурация
2. Согласование
3. Передвижение вершин Pred-to-*v*-to-Infl

Мы не полагаем, что абсолютивный показатель клитикализуется, так как зонд согласования в данном случае не Infl, а *v*. Поэтому абсолютивный показатель не передвигается к Infl вместе с корнем, а остаётся на месте.

В качестве иллюстрации попытаемся представить морфосинтаксические операции для (23) в (24).

(23) *ixq-∅-at.*
женщина-SS-2SG.ABS
‘Ты женщина.’ (кекчи [Berinstein 1985])

Таким образом, в (24) на первом этапе структура порождается в базовой конфигурации. Затем *v* отыскивает интерпретируемый *φ*-признак — в данном случае показатель 2 л. ед. ч. абсолютива *-at*. Затем инициируется вершинное передвижение Pred, создаваемой корнем *ixq*.

(24) 1. Базовая конфигурация:
$[_{\text{InflP}}\ \text{Infl}_{[+\text{EPP}]}[_{v\text{P}}\ [v_{[\text{u}\varphi]}\ \varnothing][_{\text{PredP}}[_{\text{Pred}}\ ixq][_{\text{arg}}\ \text{-}at]]]$

2. Согласование:
$[_{\text{InflP}}\ \text{Infl}_{[+\text{EPP}]}[_{v\text{P}}\ [v_{\sout{[\text{u}\varphi]}}\ \varnothing][_{\text{PredP}}[_{\text{Pred}}\ ixq][_{\text{arg}}\ \text{-}at]]]$

3. Передвижение вершин:
$[_{\text{InflP}}\ \text{Infl}_{[+\text{EPP}]}[_{\text{Pred}}\ ixq][_{v\text{P}}\ [v_{\sout{[\text{u}\varphi]}}\ \varnothing][_{\text{PredP}}[_{\text{Pred}}\ \sout{ixq}][_{\text{arg}}\ \text{-}at]]]$

В (25) предикат представляет собой предикативную DP, состоящую из основы (*b’ak’onel-∅*) и классификатора *aj*. В подобных случаях, по нашему мнению, передвижению подвержена вся предикативная DP, как представлено в (26).

(25) *aj* *b’ak’onel-∅-in.*
CLF возничий-SS-1SG.ABS
‘Я возничий.’ (кекчи [ALMG 2004: 226])

(26) 1. Базовая конфигурация:
$[_{\text{InflP}}\ \text{Infl}_{[+\text{EPP}]}[_{v\text{P}}\ [v_{[\text{u}\varphi]}\ \varnothing][_{\text{PredP}}[_{\text{clf}}\ aj\ _{\text{Pred}}\ ixq][_{\text{arg}}\ \text{-}in]]]$

2. Согласование:
$[_{\text{InflP}}\ \text{Infl}_{[+\text{EPP}]}[_{v\text{P}}\ [v_{\sout{[\text{u}\varphi]}}\ \varnothing][_{\text{PredP}}[_{\text{clf}}\ aj\ _{\text{Pred}}\ ixq][_{\text{arg}}\ \text{-}in]]]$

3. Передвижение вершин:
$[_{\text{InflP}}\ \text{Infl}_{[+\text{EPP}]}[_{\text{Pred}}[_{\text{clf}}\ aj\ _{\text{Pred}}\ ixq][_{v\text{P}}\ [v_{\sout{[\text{u}\varphi]}}\ \varnothing][_{\text{PredP}}[_{\text{clf}}\ \sout{aj}\ _{\text{Pred}}\ \sout{ixq}][_{\text{arg}}\ \text{-}at]]]$

4. Заключение

Таким образом, рассмотрев неглагольные предикаты в языке кекчи, мы сделали вывод, что все неглагольные предикаты имеют суффикс категории статуса (*-k*, *-q* или -∅). Исходя из наличия суффикса статуса мы постулировали наличие слоя *v*P в структуре неглагольных предикатов. Также предположили, что, несмотря на лицензирование абсолютива вершиной Infl в глагольных предикатах, абсолютив неглагольных предикатов в кекчи может лицензироваться v°, что может обусловливать его правую от корня позицию.

Список условных сокращений

1, 2, 3 — 1, 2, 3 лицо; ABS — абсолютив; AP — антипассив; ART — артикль; CLF — классификатор; COMPL — комплетив; DER — деривационный суффикс; ERG — эргатив; INC — инкомплетив; NEG — отрицание; NMLZ — показатель номинализации; NOM — номинатив; OPT — оптатив; PL — множественное число; POT — потенциалис; PRE — предлог; PROG — прогрессив; RN — относительное существительное; SG — единственное число; SS — суффикс статуса; WH — *wh*-вопрос.

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